

Organization Theory *Research and Design*

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Preface

Why bother with organization theory? Because, as the title of this book indicates, it tends to influence the type of research that gets done, and research, in turn, tends to influence the thinking of managers and decisions concerning organizational design. In other words, as a number of wise people have pointed out, "nothing is so practical as a good theory."¹

Theories in science, unlike in politics, are subjects of empirical research, not objects of commitment. If confirmed in the course of systematic inquiry, theories become part of the codified knowledge of a discipline; if disconfirmed, they are either discarded or reformulated. Frequently, theories subjected to empirical testing undergo modification and reformulation, specifying the conditions under which the predictions are valid. Empirically verified theories achieve the status of "normal science" or "dominant paradigm."² When, in the course of the evolution of a scientific discipline, a more comprehensive theory is developed and empirically confirmed, it replaces its predecessor in the status of a "dominant paradigm."

These truisms about science are applicable to all scientific disciplines or sub-disciplines, including the interdisciplinary field known as organization theory. This field differs significantly from the most developed fields of natural science in that (1) it has no widely accepted theories of organization, much less empirically validated theories; and (2) it has very few systematic comparative tests of the validity of alternative theories of organization.

These deficiencies are not inconsequential, because the theories advanced in the literature do not remain hermetically sealed behind the ivy-covered walls of universities. Instead, management practitioners learn of their existence and often prematurely take them seriously. Before they translate any specific organization theory into organizational design decisions, management practitioners, whether in industry, government, or other nonprofit sectors, would be well advised to inquire about the level of empirical support it enjoys.³

¹ Lewin (1945: 125–135); quoted in Van de Ven (1989).

² Cf. Kuhn (1970); and Fleck (1979).

³ Cf. Pascale (1990).

The principal thesis of this book is twofold: (1) theories of organizations require systematic research; and (2) organizational design decisions should be informed by the fruits of systematic research rather than by custom, ideology, or conventional wisdom.

In the Introduction to this book, six current theories of organization are critically reviewed: Weber's theory of bureaucracy, open systems theory, resource dependence, institutional theory, transaction-cost economics, and organizational ecology. Following this chapter, the book is divided into seven parts. In Part I, the pervasive theory of organizational hierarchy, inspired by Weber's theory of bureaucracy, is analyzed. In Part II, some persistent conflicts arising from hierarchical structures are discussed. These conflicts generate internal and external pressures for structural change that give rise to innovations, which are the subject of Part III. As organizations endeavor to produce a product or a service, they become enmeshed in an interorganizational network that has profound consequences for the success or failure of their activities. In Part IV, some of these network relationships are explored.

Beyond the confines of *interorganizational* environments are *transorganizational* environments of the cultural and social structure of the society in which an organization is embedded. Two exemplary organizations that transcend the boundaries of organizations and societies are multinational corporations and international professional associations. In Part V, transorganizational issues pertaining to these types of organizations are analyzed in the context of the increasing globalization of markets, technology, and cultural patterns.

An organizational issue that will very likely receive increasing attention in the years to come is the conflict among the diverse constituencies, or "stakeholders," of the corporation and how it might be resolved. This problem is the subject of the theory of stakeholder management, which is dealt with in Part VI. In Part VII, the so-called bottom-line issue for all types of organizations—organizational effectiveness—is addressed. A systems theory of organizational effectiveness is linked to a theory of stakeholder management. Finally, in the Conclusion, a model of organizational design and redesign is presented as a means of intergrating some of the major themes of the book.

In the course of writing this book, I have been the beneficiary of stimulating responses from many students and colleagues at the Sloan School of Management at the Massachusetts Institute of Technology and The Wharton School of the University of Pennsylvania. I am especially grateful to my several former students, Dr. Gordon B. Baty, Dr. Terry W. Rothermel, Professor Fariborz Damanpour, and Professor Paul Olk, for permitting me to include our co-authored papers in Chapters 8, 12, 14, and 17; and I am also enormously indebted to my former colleague Professor R. Edward Freeman for permitting me to include our co-authored paper in Chapter 19.

Among my various colleagues at The Wharton School of the University of Pennsylvania who gave me invaluable suggestions for improving the text, I would like to mention, Professors Jitendra Singh and Habir Singh. I alone, of course, bear full responsibility for any deficiencies this book may still have.

I also wish to thank the following publishers for permission to reprint the following papers:

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- Chapter 9* "The organization-set: Toward a theory of interorganizational relations." In James D. Thompson (ed.), *Approaches to Organizational Design*, pp. 179-190. Pittsburgh: University of Pittsburgh Press, 1966.
- Chapter 10* "An organization-set model of interorganizational relations." In M. F. Tuite, M. Radnor, and R. K. Chisholm (eds.), *Interorganizational Decision-Making*, pp. 181-200. Chicago: Adline Publishing, 1972.
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- Chapter 18* "Multinational corporations and international professional associations." *Human Relations*, 27 (1974): 587-625.

- Chapter 19* "A stakeholder theory of the modern corporation." In Tom L. Beauchamp and Norman E. Bowie (eds.), *Ethical Theory and Business*, 3rd ed., pp. 97–106. Englewood Cliffs, NJ: Prentice-Hall, 1988.
- Chapter 20* "Fiduciary management." In C. West Churchman (ed.), *The Well-Being of Organizations*, pp. 341–352. Salinas: Intersystems Publications, 1989.
- Chapter 21* "Democratizing the corporation." In Jean-Marc Choukroun and Roberta Snow (eds.), *Planning for Human Systems: Essays in Honor of Russell L. Ackoff*, pp. 213–222. Philadelphia: University of Pennsylvania Press, 1992.

Finally, I would like to express my deep appreciation to Dr. Albert G. Crawford and Mr. Rajiv Mehta for their yeoman efforts in preparing an Instructor's Manual for this book.

W. M. E.

Brief Contents

Preface	v
INTRODUCTION: AN OVERVIEW OF ORGANIZATION THEORIES	1
Part I HIERARCHICAL STRUCTURES	27
Chapter 1 THE LAW OF ORGANIZATIONAL HIERARCHY	29
Chapter 2 THE CONSEQUENCES OF ORGANIZATIONAL HIERARCHY	39
Part II ORGANIZATIONAL CONFLICTS	53
Chapter 3 ROLE STRAIN AND RECIPROCITY	55
Chapter 4 ORGANIZATION MAN AND DUE PROCESS OF LAW	67
Chapter 5 HIERARCHICAL CONFLICTS IN RESEARCH ORGANIZATIONS	77
Chapter 6 POWER, CONFLICT, AND CONSTITUTIONALISM	87
Part III INNOVATIVE PROCESSES	111
Chapter 7 ORGANIZATIONAL LAG	113
Chapter 8 ORGANIZATIONAL LAG AND PERFORMANCE	119

Part IV	
INTERORGANIZATIONAL NETWORKS	139
Chapter 9	
ORGANIZATION-SETS	141
Chapter 10	
AN ORGANIZATION-SET MODEL OF ORGANIZATIONS	155
Chapter 11	
ORGANIZATION THEORY, ADMINISTRATIVE LAW, AND GOVERNMENT AGENCIES	171
Chapter 12	
PERSONNEL FLOWS AS INTERORGANIZATIONAL RELATIONS	189
Chapter 13	
INTERHOSPITAL RELATIONS	207
Chapter 14	
RESEARCH AND DEVELOPMENT CONSORTIA	227
Part V	
TRANSORGANIZATIONAL ENVIRONMENTS	241
Chapter 15	
CULTURE AND ORGANIZATIONS	243
Chapter 16	
SOCIAL STRUCTURE AND ORGANIZATIONS	259
Chapter 17	
SOCIETAL CULTURE, ORGANIZATIONAL CULTURE, AND SOCIETAL DEVELOPMENT	293
Chapter 18	
MULTINATIONAL CORPORATIONS AND INTERNATIONAL PROFESSIONAL ASSOCIATIONS	307
Part VI	
STAKEHOLDER MANAGEMENT	333
Chapter 19	
A STAKEHOLDER THEORY OF THE MODERN CORPORATION	335
Chapter 20	
FIDUCIARY MANAGEMENT	349

Chapter 21 DEMOCRATIZING THE CORPORATION	359
Part VII ORGANIZATIONAL EFFECTIVENESS	367
Chapter 22 ORGANIZATION THEORY AND ORGANIZATIONAL EFFECTIVENESS	369
Chapter 23 STAKEHOLDER THEORY AND ORGANIZATIONAL EFFECTIVENESS	383
CONCLUSION: IMPLICATIONS FOR ORGANIZATIONAL DESIGN AND REDESIGN	397
References	409
Author Index	451
Subject Index	461

1

2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100

Detailed Contents

INTRODUCTION: AN OVERVIEW OF ORGANIZATION THEORIES	1
COMPREHENSIVE VERSUS MIDDLE-RANGE THEORIES	2
CRITERIA OF EVALUATION	2
SIX THEORIES	3
WEBER'S THEORY OF BUREAUCRACY	3
OPEN SYSTEMS THEORY	5
RESOURCE DEPENDENCE THEORY	8
INSTITUTIONAL THEORY	11
TRANSACTION-COST ECONOMICS	14
ORGANIZATIONAL ECOLOGY	18
IMPLICATIONS FOR MANAGERIAL ROLES AND ORGANIZATIONAL DESIGNS	22
GOVERNANCE STRUCTURES: FROM MANAGERIALISM TO AGENCY THEORY TO STAKEHOLDER THEORY	24
MANAGERIALISM	24
AGENCY THEORY	24
STAKEHOLDER THEORY	25
CONCLUSION	25
 Part I	
HIERARCHICAL STRUCTURES	27
Chapter 1	
THE LAW OF ORGANIZATIONAL HIERARCHY	29
SOME INDICES OF HIERARCHICAL STRUCTURE	30
HEIRARCHY OF SKILLS	30
HEIRARCHY OF REWARDS	31
HIERARCHY OF AUTHORITY	32
EMPIRICAL APPLICATION OF STRUCTURAL INDICES	34
INDEX CONSTRUCTION	34
ANALYSIS OF STRUCTURAL CHANGE	35
ANALYSIS OF CAUSES AND CONSEQUENCES OF HIERARCHICAL STRUCTURE	35
COMPARATIVE STUDY OF HIERARCHICAL STRUCTURE	36
CONCLUSION	37

Chapter 2	39
THE CONSEQUENCES OF ORGANIZATIONAL HIERARCHY	40
DIMENSIONS OF HIERARCHY	42
AN ALTERNATIVE HYPOTHESIS	45
ORGANIZATIONAL HIERARCHY AND INDUSTRIAL DEMOCRACY	46
SHOP-FLOOR DEMOCRACY	49
THE DESTRATIFICATION-RATIONALIZATION HYPOTHESIS	50
NEED FOR AN EXPERIMENTAL PERSPECTIVE	51
CONCLUSION	
 Part II	
ORGANIZATIONAL CONFLICTS	53
 Chapter 3	55
ROLE STRAIN AND RECIPROCITY	56
ORGANIZATIONAL PRESSURES	58
ROLE STRAINS	60
THE NORM OF RECIPROCITY	61
ALTERNATIVE ROLE MODELS	63
SCOPE OF THE PROBLEM OF ROLE STRAIN	65
CONCLUSION	
 Chapter 4	67
ORGANIZATION MAN AND DUE PROCESS OF LAW	68
A CRITICISM OF WHYTE'S THESIS	69
STRUCTURAL SOURCES OF THE IDEOLOGY OF THE ORGANIZATION MAN	72
SOME CONSEQUENCES OF THE IDEOLOGY OF THE ORGANIZATION MAN	73
POTENTIAL COUNTERVAILING FORCES TO THE IDEOLOGY OF THE ORGANIZATION MAN	75
CONCLUSION	
 Chapter 5	77
HIERARCHICAL CONFLICTS IN RESEARCH ORGANIZATIONS	79
PROCEDURE	80
RESULTS	80
INCIDENCE OF CONFLICT	81
TYPES OF CONFLICT	82
PERCEPTION OF INSTITUTIONALIZATION OF A DUE PROCESS NORM	83
RESOLUTION OF CONFLICTS	85
CONCLUSION	
 Chapter 6	87
POWER, CONFLICT, AND CONSTITUTIONALISM	

DUE PROCESS NORMS	89
ORGANIZATIONAL CITIZENSHIP	91
FIDUCIARY MANAGEMENT	93
SOME HYPOTHESES ABOUT ORGANIZATIONAL CONSTITUTIONALISM	95
ILLUSTRATIVE DATA ON ORGANIZATIONAL CONSTITUTIONALISM	97
RELIGIOUS ORGANIZATIONS	97
MILITARY ORGANIZATIONS	99
ACADEMIC ORGANIZATIONS	103
ORGANIZATIONAL CONSTITUTIONALISM AND HIRSCHMAN'S THEORY	108
CONCLUSION	109
Part III	
INNOVATIVE PROCESSES	111
Chapter 7	
ORGANIZATIONAL LAG	113
PROCESS OF INNOVATION	114
OSBURN'S HYPOTHESIS OF "CULTURAL LAG"	114
CONCEPT OF ORGANIZATIONAL LAG	115
RESISTANCE TO TECHNICAL AND ADMINISTRATIVE INNOVATIONS	116
CONCLUSION: MINIMIZING ORGANIZATIONAL LAG	117
Chapter 8	
ORGANIZATIONAL LAG AND PERFORMANCE	119
THEORETICAL FRAMEWORK	120
DEFINITION OF INNOVATION	120
ADMINISTRATIVE AND TECHNICAL INNOVATIONS	121
ORGANIZATIONAL LAG CONCEPT	122
ORGANIZATIONAL LAG AND PERFORMANCE	123
HYPOTHESIZED DYNAMICS OF INNOVATION	124
RESEARCH DESIGN	126
SAMPLE	127
INDEPENDENT VARIABLES	127
DEPENDENT VARIABLE	130
RESULTS	131
DISCUSSION	135
CONCLUSION	137
Part IV	
INTERORGANIZATIONAL NETWORKS	139
Chapter 9	
ORGANIZATION-SETS	141

THE ROLE-SET	143
THE ORGANIZATION-SET	144
SOME DIMENSIONS OF ORGANIZATION-SETS	145
SOME HYPOTHESES ABOUT ORGANIZATION-SETS	146
SOME METHODOLOGICAL PROBLEMS	150
GRAPH THEORY	150
INPUT-OUTPUT ANALYSIS	152
CONCLUSION	
Chapter 10	155
AN ORGANIZATION-SET MODEL OF ORGANIZATIONS	156
A SYSTEMS MODEL	158
DIMENSIONS OF ORGANIZATION-SETS	160
ROLE-SETS OF BOUNDARY PERSONNEL	
IMPLICATIONS OF THE MODEL FOR A THEORY OF ORGANIZATIONAL CHANGE	162
ANALYSIS OF SOME CASES OF INTERORGANIZATIONAL RELATIONS	164
SECURITIES AND EXCHANGE COMMISSION	165
INTERSTATE COMMERCE COMMISSION	166
FOOD AND DRUG ADMINISTRATION	168
FEDERAL TRADE COMMISSION	170
CONCLUSION	
Chapter 11	
ORGANIZATION THEORY, ADMINISTRATIVE LAW, AND GOVERNMENT AGENCIES	171
THE EXPANDING ROLE OF GOVERNMENT ADMINISTRATION	172
SOME TRENDS IN AMERICAN ADMINISTRATIVE LAW	174
SOME TRENDS IN ORGANIZATION THEORY	179
AN ORGANIZATION-SET MODEL OF THE ADMINISTRATIVE PROCESS	181
RESEARCH STRATEGIES	184
CONCLUSION	187
Chapter 12	189
PERSONNEL FLOWS AS INTERORGANIZATIONAL RELATIONS	190
FLOW OF PERSONNEL AMONG ORGANIZATIONS	192
PROCEDURE	194
RESULTS	194
IDENTIFICATION OF CLUSTERS	198
ANALYSIS OF THE CLUSTERS	202
CORRELATES OF MEASURES OF FACULTY INTERCHANGE	204
CONCLUSION	

Chapter 13	
INTERHOSPITAL RELATIONS	207
SOME OBSERVATIONS ON INTERHOSPITAL RELATIONS IN THE UNITED STATES	208
A STRATEGY, STRUCTURE, AND PERFORMANCE MODEL	210
SOURCES OF DATA	213
RESULTS	214
EMERGENCE OF THE FOUR MULTIHOSPITAL SYSTEMS	214
STRATEGY OF MULTIHOSPITAL SYSTEMS	214
STRUCTURE OF MULTIHOSPITAL SYSTEMS	217
PERFORMANCE OF MULTIHOSPITAL SYSTEMS	217
INTERRELATIONSHIP OF STRATEGY AND STRUCTURE	222
INTERRELATIONSHIP OF STRATEGY, STRUCTURE, AND PERFORMANCE	222
CONCLUSION	223
Chapter 14	
RESEARCH AND DEVELOPMENT CONSORTIA	227
PRECURSORS	228
R&D CONSORTIA	228
LEGAL ASPECTS	230
PROFILE OF THE 137 CONSORTIA	231
MANAGING R&D CONSORTIA	232
TWO DISTINGUISHING CHARACTERISTICS	232
FOUR CONSORTIA	233
SEVEN GENERIC PROBLEMS	234
CONCLUSION	238
Part V	
TRANSORGANIZATIONAL ENVIRONMENTS	241
Chapter 15	
CULTURE AND ORGANIZATIONS	243
TOWARD AN ORGANIZATIONALLY RELEVANT MODEL OF CULTURE	245
DEFINITIONS OF CULTURE	246
THE NORMATIVE DIMENSION	247
CULTURE, ORGANIZATIONAL PROCESSES, AND ORGANIZATIONAL SYSTEM OUTPUTS	250
PROBLEMS OF MEASURING CULTURE	252
AN APPRAISAL OF CROSS-CULTURAL RESEARCH	254
A PARADIGM FOR FUTURE RESEARCH	256
CONCLUSION	257

Chapter 16	
SOCIAL STRUCTURE AND ORGANIZATIONS	259
THE ORGANIZATION-ENVIRONMENT NEXUS	261
CONTEXT	262
ORGANIZATIONAL DOMAIN	262
TASK ENVIRONMENT	263
SOCIAL SETTING	263
SOCIETAL ENVIRONMENT	264
GENERALIZING CONTINGENCY THEORY	264
ALTERNATIVE CONCEPTIONS OF SOCIAL STRUCTURE	264
AN EXPLORATORY SOCIAL-STRUCTURAL MODEL OF ORGANIZATIONS	268
ROLE-SETS	269
STATUS-SETS	270
STATUS-SEQUENCES	272
ORGANIZATION-SETS	274
INSTITUTIONAL STRUCTURE	276
EXAMPLES OF SOCIAL-STRUCTURAL EFFECTS ON ORGANIZATIONS	282
EXAMPLES OF ORGANIZATIONAL EFFECTS ON SOCIAL STRUCTURE	284
SOME IMPLICATIONS OF THE SOCIAL-STRUCTURAL MODEL FOR FUTURE ORGANIZATIONAL RESEARCH	286
SOME CONJECTURES ABOUT THE DESIGN OF ORGANIZATIONS OF THE FUTURE	288
CONCLUSION	290
Chapter 17	
SOCIETAL CULTURE, ORGANIZATIONAL CULTURE, AND SOCIETAL DEVELOPMENT	293
A CRITIQUE OF THE CONCEPT OF ORGANIZATIONAL CULTURE	294
ORGANIZATIONAL CULTURE FROM AN ANTHROPOLOGICAL PERSPECTIVE	295
SOCIETAL CULTURE AND ORGANIZATIONAL CULTURE	297
A MODEL OF SOCIETAL CULTURE, ORGANIZATIONAL CULTURE, AND SOCIETAL DEVELOPMENT	299
SOCIAL STRUCTURE AND SOCIETAL CULTURE	300
SOCIAL STRUCTURE AND ORGANIZATIONAL CULTURE	300
SOCIAL STRUCTURE AND ORGANIZATIONAL STRUCTURE	300
SOCIETAL CULTURE AND MANAGEMENT ATTITUDES	301
MANAGEMENT ATTITUDES AND ORGANIZATIONAL CULTURE	301
MANAGEMENT ATTITUDES AND ORGANIZATIONAL PROCESSES	301
IMPACT OF ORGANIZATIONAL CULTURE ON ORGANIZATIONAL STRUCTURE AND PROCESSES	302
IMPACT OF ORGANIZATIONAL CULTURE, ORGANIZATIONAL STRUCTURE, AND ORGANIZATIONAL PROCESS ON ORGANIZATIONAL EFFECTIVENESS	303

IMPACT OF DETERMINANTS OF ORGANIZATIONAL EFFECTIVENESS ON SOCIETAL DEVELOPMENT	304
CONCLUSION	305
Chapter 18	
MULTINATIONAL CORPORATIONS AND INTERNATIONAL PROFESSIONAL ASSOCIATIONS	307
ALTERNATIVE MODELS OF THE INTEGRATION OF THE INTERNATIONAL SYSTEM	309
GROWTH AND SYSTEM LINKAGES	312
MULTINATIONAL CORPORATIONS	312
INTERNATIONAL PROFESSIONAL ASSOCIATIONS	318
SOME HYPOTHESES ON THE INTEGRATION OF THE INTERNATIONAL SYSTEM	327
CONCLUSION	331
Part VI	
STAKEHOLDER MANAGEMENT	333
Chapter 19	
A STAKEHOLDER THEORY OF THE MODERN CORPORATION	335
THE ATTACK ON MANAGERIAL CAPITALISM	337
THE LEGAL ARGUMENT	337
THE ECONOMIC ARGUMENT	339
A STAKEHOLDER THEORY OF THE FIRM	339
FOUNDATION OF A THEORY	339
THE STAKEHOLDER CONCEPT	340
STAKEHOLDERS IN THE MODERN CORPORATION	341
THE ROLE OF MANAGEMENT	343
STRUCTURAL MECHANISMS	345
CONCLUSION	346
Chapter 20	
FIDUCIARY MANAGEMENT	349
THE BERLE AND MEANS THESIS	350
MANAGERIAL DISCRETION, THE AGENCY PROBLEM, AND THE LEGITIMACY OF CORPORATE POWER	351
THE STAKEHOLDER THEORY OF THE FIRM	352
THE FIDUCIARY CONCEPT	354
FIDUCIARY MANAGEMENT IN ACTION: THE CHRYSLER CASE	355
CONCLUSION	356

Chapter 21	
DEMOCRATIZING THE CORPORATION	359
POLITICAL DEMOCRACY VERSUS ECONOMIC DEMOCRACY	360
STAKEHOLDER MANAGEMENT AND REDESIGNING THE CORPORATION	361
SOME PRINCIPLES OF CORPORATE DEMOCRACY	364
CONCLUSION	365
 Part VII	
ORGANIZATIONAL EFFECTIVENESS	367
Chapter 22	
ORGANIZATION THEORY AND ORGANIZATIONAL EFFECTIVENESS	369
AN ASSESSMENT OF SELECTED RESEARCH	372
A SYSTEMS THEORY PERSPECTIVE	374
PROBLEMS OF MEASURING ORGANIZATIONAL EFFECTIVENESS	378
CONCLUSION	381
Chapter 23	
STAKEHOLDER THEORY AND ORGANIZATIONAL EFFECTIVENESS	383
FROM CORPORATE SOCIAL RESPONSIBILITY TO STAKEHOLDER MANAGEMENT THEORY	385
IMPLICATIONS FOR MEASURING ORGANIZATIONAL EFFECTIVENESS	389
FROM A SOCIAL AUDIT TO A CORPORATE STAKEHOLDER AUDIT	391
INSTITUTIONALIZING CORPORATE STAKEHOLDER AUDITS	395
CONCLUSION	396
CONCLUSION: IMPLICATIONS FOR ORGANIZATIONAL DESIGN AND REDESIGN	397
ENVIRONMENTAL PRESSURES	399
ENVIRONMENTAL MONITORING	401
ORGANIZATIONAL LEARNING	401
ENVIRONMENTAL ADAPTATIONS	403
INNOVATIVE PROCESSES AND ORGANIZATIONAL LEARNING	405
ORGANIZATIONAL EFFECTIVENESS	405
ORGANIZATIONAL DESIGN DECISIONS AS EXPERIMENTS	406
REFERENCES	409
AUTHOR INDEX	451
SUBJECT INDEX	461

An Overview of Organization Theories

The field of study known as “organization theory” shows signs of being a growth industry. Increasing numbers of professors are teaching courses in this field and undertaking organizational studies; new journals on the subject have recently been launched; the population of M.B.A. students—many of whom take courses in this field—is growing steadily in the U.S. and markedly in Western Europe (Greenhouse, 1991); and numerous popular books on organizations and management, such as Peters and Waterman’s *In Search of Excellence* (1982) and Drucker’s *Innovation and Entrepreneurship* (1985), have been published.

Given the growth and popularity of this field, what is the state of its theory?

COMPREHENSIVE VERSUS MIDDLE-RANGE THEORIES

Although the field is called “organization theory,” there is no *one* theory that dominates the discipline. Instead, a number of theories compete for the attention of researchers, a fact that is a healthy development (Merton, 1975). As in the case of economic competition, one would expect that theoretical *pluralism*, as opposed to theoretical *monism*, would promote the growth of knowledge in a field (Lakatos, 1970: 15). This expectation is based on the assumption that it is possible to test the relative merits of alternative theories. There are, however, some organization theorists who claim that the various theories of organizations are “incommensurable” and that hence it is impossible to put their relative merits to a test. They further argue that this type of theoretical pluralism is a desirable state of affairs (Jackson and Carter, 1991).

Among the major theories in this field, I have singled out six for a comparative assessment: Weber’s theory of bureaucracy, open systems theory, resource dependence theory, transaction-cost economics, institutional theory, and organizational ecology. These theories differ in disciplinary origin, scope, level of analysis, heuristic value, and claims to comprehensiveness. Weber’s classical theory of bureaucracy stems from his sociological theory of domination; open systems theory, as developed by Bertalanffy (1968) and Miller (1972), is derived from biology and engineering; resource dependence theory is a spin-off of organization theory literature on strategic choice; transaction-cost theory is an outgrowth of institutional economics and industrial organization; institutional theory emerged from a sociological analysis of organization-environment relations; and organizational ecology was developed against the backdrop of social ecology and biology, on the one hand, and demography, on the other.

As is true in other fields of research, each theory tends to attract a coterie of researchers who apply the theory in their research. Because of the substantial difficulties of testing the relative merits of two or more theories, there is a tendency for researchers to use a single organization theory as a point of departure in their research and to become advocates of a given theory. In the course of time, there is also a tendency for researchers to claim a level of comprehensiveness for a particular theory that is unwarranted. Instead of being comprehensive theories that are applicable to all types of organizations and organizational problems, regardless of time and space, the six organization theories I shall discuss may be designated more properly as “middle-range” theories (Merton, 1957a: 9; Pinder and Moore, 1980).

CRITERIA OF EVALUATION

What criteria of evaluation shall we use in our effort to assess these six theories? Apart from level of analysis, the most frequently mentioned criterion for evaluating a theory is its empirical validity (Bacharach, 1989), or the nature of the evidence that supports it. This criterion presupposes that the variables

underlying the theory can be operationalized, that the constructs underlying the variables are clear, and that the relationships or propositions derived from the theory are falsifiable. A third criterion for assessing quality of the theory is utility (Brief and Dukerich, 1991). This usually refers to the intrinsic quality of the theory, which means its predictive and explanatory power. Another interpretation of the utility of a theory, however, is justifiable in this context, namely, its pragmatic utility. More specifically, it is important to consider a theory's implications for managerial roles and organizational design. I shall now turn to a brief consideration of each of the six theories in terms of these four criteria of evaluation: level of analysis, empirical validity, theoretical utility, and pragmatic utility.

SIX THEORIES

Weber's Theory of Bureaucracy

Weber's theory of bureaucracy (1947a) has often been referred to as a "classical theory" for a number of reasons. First, it was developed early in the twentieth century, when Taylor (1947) was formulating his theory of scientific management and Fayol (1949) was articulating his theory of administration. Second, it was virtually the first theory to capture the attention of organizational researchers. Applying his method of "ideal types," Weber (1947a: 328) first distinguishes three bases of legitimate authority:

1. "*Rational grounds*: Resting on a belief in the 'legality' of patterns of normative rules and the right of those elevated to authority under such rules to issue commands (legal authority)."
2. "*Traditional grounds*: Resting on an established belief in the sanctity of immemorial traditions and the legitimacy of the status of those exercising authority under them (traditional authority)."
3. "*Charismatic grounds*: Resting on devotion to the specific and exceptional sanctity, heroism or exemplary character of an individual person, and of the normative patterns or order revealed or ordained by him (charismatic authority)."

He then spelled out the ideal typical characteristics of bureaucratic authority: jurisdictional areas governed by rules and regulations; hierarchically structured offices or positions; and management based upon written documents and requiring expertise, and governed by general rules, "knowledge of [which] represents a special technical learning which the official possesses" (Weber, 1947b: 196–198). This type of organization, according to Weber (1947a: 337), is:

from a purely technical point of view, capable of attaining the highest degree of efficiency and is in this sense formally the most rational known means of carrying out imperative control over human beings. It is superior to any other form in

precision, in stability, in the stringency of its discipline, and in its reliability. It thus makes possible a particularly high degree of calculability of results for the heads of the organization and for those acting in relation to it. It is finally superior both in intensive efficiency and in the scope of its operations, and is formally capable of application to all kinds of administrative tasks.

For this reason, there has been a process of bureaucratization in modern society. As Weber (1947a: 334) puts it:

This type of organization is in principle applicable with equal facility to a wide variety of different fields. It may be applied in profit-making business or in charitable organizations, or in any number of other types of private enterprises serving ideal or material ends. It is equally applicable to political and to religious organizations. With varying degrees of approximation to a pure type, its historical existence can be demonstrated in all these fields.

Weber's theory—summarized in Table I.1—was the point of departure for a variety of studies in the 1950s and 1960s. Especially noteworthy are the studies of the gypsum mine and factory by Gouldner (1954), of the government employment and regulatory agencies by Blau (1955), and of the British Aston group by Pugh, Hickson, Hinings, and Turner (1968, 1969). It also gave rise to a *structural* perspective on organizations, which argued that all organizations can be analyzed in terms of “architectural” variables such as the number of echelons, span of control, degree of centralization, degree of formalization, and degree of specialization (Scott, 1975; Mintzberg, 1980).

In Chapter 1, with Weber's theory in mind, I focus on the measurement of organizational hierarchy, distinguishing between three dimensions: hierarchy of authority, hierarchy of skills, and hierarchy of rewards. I also consider the ques-

Table I.1 *An Overview of Weber's Theory of Bureaucracy*

Key Concepts	Rational-legal authority A system of graded positions Expertise (as a criterion for recruitment and promotion) Rules Written documents Bureaucratization
Major Assumptions	A rational-legal system of authority is (1) universally applicable; and (2) the most efficient mode of organization.
Units of Analysis	Subunit of an organization and total organization
Key Proposition	A rational-legal bureaucracy is more efficient than one based on the authority of tradition or charisma.
Problem Areas	What are the relationships among the characteristics of Weber's ideal type of bureaucracy? What are the correlates of bureaucratic structures?

tion of the conditions under which the degree of hierarchical differentiation can be reduced. In Chapter 2, I introduce a fourth dimension of organizational hierarchy: the distribution of information. In addition, I formulate a causal model interrelating organizational hierarchy with three other variables: work alienation, organizational commitment, and organizational effectiveness. Not surprisingly, organizations designed according to the principles of hierarchy generate inequalities of power, rewards, prestige, and information. In Chapter 3, I examine one consequence of hierarchical systems of control: the widespread occurrence of "role strain," defined as the "felt difficulty in fulfilling role obligations" (Goode, 1960: 483).

One of the principal drawbacks of Weber's theory is that his ideal type of bureaucracy encouraged researchers to treat organizations as "closed systems." This perspective can scarcely be attributed to Weber, however, because he was certainly not oblivious to the social-system effects on bureaucracies. In fact, he pointed to the emergence of the modern state and the capitalist market economy as prerequisites for the rise of the rational-legal bureaucracy.

In the 1970s, the Weberian structural perspective stimulated organizational researchers to undertake comparative studies of organizations in different societies and in different institutional settings (Heydebrand, 1973b; Lammers and Hickson, 1979a). For example, in a study of manufacturing organizations in six countries, Hickson and his colleagues (1979) explored the relationship of three structural variables (formalization, specialization, and centralization) with context variables such as size and dependence (the degree to which an organization is tied to the environment). Underlying all these studies is either an implicit or explicit assumption that organizations are "open systems."

Open Systems Theory

As soon as the closed system view of organization was relinquished, there was a perceived need for a theory to conceptualize organizations-environment relationships. This need was met by open systems theory, a paradigm that emerged in the 1950s. Bertalanffy's (1950, 1968) general systems theory, followed by the work of Boulding (1956), Ashby (1956), Rapoport (1966), Miller (1965, 1972, 1978), and others, exerted a powerful intellectual influence on the social sciences through the 1960s and 1970s.

Systems theorists postulate a hierarchy of levels that is applied to all types of systems: physical, biological, and social (Boulding, 1956; Miller, 1965). Miller, for example, sets forth a classification of seven living systems: cells, organs, organisms, groups, organizations, societies, and supranational systems. Each system can be decomposed into subsystems, and each system interacts with a suprasystem, which Miller (1965: 218) defines as "the next higher system in which it is a component or subsystem." As applied to organizational systems, "organizations are subsystems, components, or subcomponents of societies, sometimes of more than one society." (Miller, 1972: 5)

Viewing organizations as open systems presupposes a continuing exchange of resources with their environments. This environmental embeddedness entails

importing various inputs that are then transformed—with the aid of the organization's subsystems and processes—into goods or services that are subsequently exported to the environment. The process of feedback from the environment, in the form of information, profits, and the like, enables the organization to make necessary adjustments and thus achieve a dynamic equilibrium. The concept of negative feedback refers to a process whereby deviations from a predetermined goal are reduced, whereas positive feedback refers to a process whereby deviations from a predetermined goal are increased (see Table I.2).

The challenge to organizational designers and decision makers is to build into the system mechanisms to maintain negative feedback. This requires (1) obtaining timely information from the environment; (2) acquiring necessary organizational inputs; (3) designing appropriate organizational throughputs (adaptive structures, processes, and technologies); and (4) exporting organizational outputs to the environment. And since the environment is undergoing continual change, organizational decision-makers should continually adapt its structures, processes, and technologies. The systems theorist Ashby (1956: 123–34) has formulated what he calls the “law of requisite variety,” which states that the rate of change of organizational systems must correspond to the rate of change of environmental systems. It is implicit that violations of Ashby's law will have detrimental effects on organizational performance, a proposition that is, of course, verifiable. Likewise verifiable are the numerous hypotheses Miller derives from his application of general systems theory to organizations. To il-

Table I.2 *An Overview of Open Systems Theory*

Key Concepts	Open system Organizational inputs Organizational throughputs Organizational outputs Organizational feedback
Major Assumptions	Organizations are open systems. Organizations have ongoing interactions with other organizational systems in their environment.
Units of Analysis	Organizational subsystems and total organizational system
Key Propositions	Maintaining negative feedback in an organizational system requires the inflow of necessary inputs, the design of appropriate throughputs, and the outflow of appropriate outputs. Ashby's law of requisite variety states that the rates of change of organizational systems must correspond to the rates of change of environmental systems.
Problem Areas	What are the relationships between external organizational systems and the focal organizational system? Are the organizational throughputs (i.e., social structure and technology) appropriately designed to process organizational inputs? Are the organizational outputs effectively channeled to markets or relevant environments? What are the effects of negative and positive feedback over time?

illustrate the range of his hypotheses, ten of his numerous hypotheses are listed below:

In general, the more structurally different types of members or components a system has, the more segregation of functions there is.

The amount of information transmitted between points within a system is significantly larger than the amount transmitted across its boundary.

In general the farther components of a system are from one another and the longer the channels between them are, the less is the rate of information flow among them.

The functional segregation of components means that each one receives some information which the others do not. The greater this segregation of information, the more do the subsystems differ in decoding and deciding.

In systems which survive, the component with the most relevant information available to its decider is the one most likely to exercise power over or elicit compliance from other components in the system.

The deciders of a system's subsystems and components satisfice (i.e., make sufficiently good approximations to accomplishment in order to survive in its particular environment) shorter-term goals than does the decider of the total system.

Increase in the number of components in a system requires a disproportionately larger increase in the number of information-processing and deciding components.

As a system grows and adds more components, the components in general become increasingly independent in decision making. This is probably because the system cannot meet the increasing costs of processing the information to the system's decider, as required for centralized deciding.

As decentralization increases, echelons or components of the system's decider increasingly make decisions without the benefit of relevant information existing elsewhere in the system.

If a system's negative feedback discontinues and is not restored by that system or by another on which it becomes parasitic or symbiotic, it decomposes into multiple components and its suprasystem assumes control of them. (Miller, 1972: 2-5)

What has been the impact of open systems theory on organization theory? In terms of thinking, speculation, and analysis, this theory has had extensive influence; witness such publications as Buckley (1967), Seiler (1967), Emery (1969), Baker (1973), and Katz and Kahn (1978). It also stimulated the elaboration by Emery and Trist (1960) of their theory of sociotechnical systems and the subsequent further development of the theory by Trist (1981). Similarly, it provided a framework for the formulation of my organization-set model put forth in Chapters 9 and 10 of this book.

In terms of empirical research on organizations, however, the open systems theory has had surprisingly little impact. As Ashmos and Huber (1987: 610) point out, "Many writers have argued that open systems thinking has guided organization research. . . . It appears, however, that though the open system model has been widely used to label and legitimize organizational studies, it has seen

little use as a research guide." They lament the fact that organizational researchers have failed to exploit the potential contributions of this theory in empirical research. In particular, the various properties of open systems enumerated by Miller (1965: 193–237) and Katz and Kahn (1978: 23–36) have not been the subject of systematic inquiry:

Although these properties are postulated as characterizing all open systems, it would be interesting to determine whether (a) the extent to which the properties are important, or (b) the degree to which the properties characterize different organizations are variables that could enrich organization theory. (Ashmos and Huber, 1987: 616)

These authors consider a number of explanations as to why organizational researchers have made so little formal use of this theory, one of which is that the constructs of the theory are couched in such abstract terms that they are difficult to operationalize (Ashmos and Huber, 1987: 618). Hall (1977: 59) goes further in seeking to explain the research neglect of this theory: "Few researchers have the tools or the ability to take into account all the various components that must be included in even a relatively simple open systems model. The measurement of the various forms of inputs and the consequences of outputs has not been even moderately developed." One exception to this observation is Chapter 22 in this book, in which I formulate a model of organizational effectiveness explicitly based on some key properties of open systems theory. What is more, in Chapter 13 this model is applied in a study on interorganizational relations among hospitals.

Regardless of the general neglect of this theory in organizational research, it unquestionably sensitized researchers to the critical importance of studying organization-environment relations, so much so that the four remaining theories to be discussed in this chapter—resource dependence theory, institutional theory, transaction-cost analysis, and organizational ecology—all address the problem of the relation of the organization to its environment.

Resource Dependence Theory

The basic premise of resource dependence theory is that organizations are open systems. From this it follows that organizations (1) are not self-sufficient; (2) cannot generate all the necessary resources internally; and (3) must mobilize resources from other organizations in their environment if they are to survive (Yuchtman and Seashore, 1967). To acquire the necessary resources involves interacting with other organizations that control these critical resources (Pfeffer and Salancik, 1978). This results in interorganizational dependencies that are fraught with uncertainties.

Given the criticality, scarcity, and intensity of the required resources, an organization's dependence on other organizations may be very high, which means that those organizations can exercise power over the organization in question. To reduce such resource dependence and the uncertainties associated with it, an

organization may choose the environment in which it operates. Hence, in some respects, organizations “create” or “enact” their environment rather than being “selected” by the environment (Pfeffer and Salancik, 1978: 260). Organizational decision makers may also resort to strategic choices (Child, 1972) to adapt their internal structures and processes as well as their environmental relationships. In so doing, organizations pursue two objectives with respect to their environment:

- (1) to acquire control over resources that minimize their dependence on other organizations and (2) to acquire control over resources that maximize the dependence of other organizations on themselves. Attaining either objective is thought to affect the exchange between organizations, thereby affecting an organization's power. (Ulrich and Barney, 1984: 472)

This theory is formulated in general terms so as to be applicable to various types of organizations (see Table I.3). In regard to the firm, Pfeffer (1987: 26–27) has summarized the resource dependence perspective as follows:

- (1) the fundamental units for understanding intercorporate relations and society are organizations; (2) these organizations are not autonomous, but rather

Table I.3 An Overview of Resource Dependence Theory

Key Concepts	Resource dependence Resource intensity Resource criticality Environmental creation Strategic choice
Major Assumptions	Organizations require resources to survive. Organizations are dependent upon an organizational environment for resource acquisition. Organizations seek to minimize their resource dependence on other organizations and to maximize the resource dependence of other organizations.
Units of Analysis	Total organization and interorganizational relationship
Key Propositions	To reduce resource dependence, organizational decision makers make strategic choices to adapt organizations to environmental pressures and uncertainties. Interorganizational transactions are a function of resource intensity, resource criticality, and power asymmetry; organizational forms retained may include interlocking directorates, mergers, joint ventures, etc. Organizations seek to coopt other organizations in their environment, exerting power over them to ensure the supply of resources.
Problem Areas	How do organizations deal with resource dependency problems? Under what conditions do strategic choices made by top management reduce an organization's resource dependence?

are constrained by a network of interdependencies with other organizations; (3) interdependence, when coupled with uncertainty about what the actions will be of those with which the organization is interdependent, leads to a situation in which survival and continued success are uncertain; and, therefore, (4) organizations take actions to manage external interdependencies, although such actions are inevitably never completely successful and produce new patterns of dependence and interdependence. Further, (5) these patterns of dependence produce interorganizational as well as intraorganizational power, where such power has some effect on organizational behavior. Organizations tend to comply with the demands of those interests in their environment which have relatively more power, and those inside the organization who can successfully cope with these external contingencies come to have comparatively more power within the organization.

Several strategies are used by organizations to manage their dependence on others or to increase the dependence of others on them. The first strategy is the absorption of dependence by means of vertical integration, horizontal integration, mergers, and acquisitions. Pfeffer (1972a), in a study of 854 mergers during 1948–1969, found that the proportion of mergers between industries was positively correlated with the proportion of transactions between industries.

The second strategy is the negotiation of dependence by establishing cooperative relations by means of interlocking directorates, joint ventures, and cartels. Studies of interlocking boards of directors are consistent with the prediction of the theory. According to Pfeffer (1972b: 222), “business organizations (and other organizations) use their boards of directors as vehicles through which they coopt, or partially absorb, important external organizations with which they are interdependent.” Burt (1983: 168) reported evidence of the relationship between board of director interlocks and market constraints: “Directorate ties were most frequent in industries where control over industry prices would have been most uncertain.”

In a study of joint programs undertaken by social welfare and health organizations, Aiken and Hage (1968: 930) observed: “It is the scarcity of resources that forces organizations to enter into more cooperative activities with other organizations.” And, as I show in Chapter 14, the high cost, risk, and complexity of research in the semiconductor and electronics industries prompted American companies in the 1980s to establish R&D consortia in an effort to remain competitive.

Yet another strategy to manage interorganizational interdependence is the utilization of judicial and administrative law (see Chapter 11) channels to press claims against competitors. Dunford (1987) has identified various tactics to suppress technology, such as patent consolidation, patent pool, qualified licensing, and trade secrets. Because of the frequent failure of courts and regulatory agencies to sanction companies engaging in patent infringements or antitrust violations, firms have an incentive to resort to the tactics of suppression of technology. “Suppression seems to act as means of achieving or seeking to achieve one or more of a range of outcomes. These include the saturation of a market with an existing technology before the new one is released, prevention of the de-

velopment of new technology by competitors, maintenance of standardization, and maintenance of cartel arrangements" (Dunford, 1987: 522).

In short, a substantial number of studies have produced results consistent with the predictions of resource dependence theory.

Institutional Theory

Unlike the three previous theories, institutional theory suffers from the imprecision of its concepts, partly because of the complexities of its level and scope of analysis. Its core concepts of institution, institutionalization, and institutional environment are derived from macro-level theory in sociology (see Table I.4). Thus, for example, the concept of institution is used to denote a norm or rule as well as an organization; institutionalization refers to both a process of acceptance and incorporation as well as an end state; and institutional environment rarely specifies the institutional source of the pressure on an organization. Several examples of the ambiguous use of these and related concepts follow:

"Institutions are socially constructed, routine-reproduced (*seteris paribus*), programs or rule systems." (Jepperson, 1991: 149)

"A 'No Smoking' sign is an institution with legal status and implications as well as an attempt to regulate smoking behavior." (Meyer and Rowan, 1977: 341)

"While we may wish to consider formal organization as an institution, or argue that formal organization can carry or generate institutions, or that some

Table I.4 An Overview of Institutional Theory

Key Concepts	Institution Institutionalization Institutional environment Institutional isomorphism Legitimacy
Major Assumptions	All organizations are embedded in institutional environments. Institutional environments affect organizational structures, practices, and performance.
Units of Analysis	Total organization Organization-environment relationship
Key Propositions	Organizations are more likely to survive if they obtain legitimacy and social support from their institutional environment. Organizational structures evolve through a process of adaptation and incorporate elements from institutional environments.
Problem Areas	Why are organizations so similar? Why do organizations differ in legitimacy and institutionalization? How does one measure the effect of institutional environment? How do institutional environments affect organizational structure and performance?

organizations have become institutions, it is arbitrary to identify institutionalization with formal organization." (Jepperson, 1991: 149)

"One can perhaps best conceive of degrees of institutionalization in terms of relative vulnerability to social intervention. An institution is highly institutionalized if it presents a near insuperable collective action threshold." (Jepperson, 1991: 151)

"The formal structures of many organizations in post-industrial society dramatically reflect the myths of their institutional environments instead of the demands of their work activities." (Meyer and Rowan, 1977: 341)

"Independent of their productive efficiency, organizations which exist in highly elaborated institutional environments and succeed in becoming isomorphic with these environments gain the legitimacy and resources needed to survive." (Meyer and Rowan, 1977: 352)

In Chapter 16, I present an institutional analysis of organizations based on the sociological concept of society as a complex of institutions or subsystems, each of which performs an indispensable function in maintaining societal stability. I single out for discussion and hypothesis formulation six institutional societal spheres: the family, the economy, the polity, religion, education, and legal institutions. Societies vary in the social ranking or stratification of their institutions. Thus, theocratic societies focus on religion as their dominant institution; totalitarian societies focus on political institutions; and democratic market economies rank their political and economic institutions ahead of others.

As applied to organizational analysis, each of the institutional societal spheres constitutes an environment, that is, a set of norms and values as well as a source of pressures on organizations. Legal institutions, as Parsons (1962: 57) has observed, represent a generalized system of controls and thus can apply to all institutional spheres and to all types of organizations. One of the principal mechanisms for bridging institutional spheres and organizations is the boundary-spanning unit or role. In his well-known analysis of the three levels of organizational hierarchy, Parsons (1960) characterizes organizational decision-makers as "institutional" personnel who are concerned with overall policy making, with the legitimation of the organization, and with the mobilization of resources.

In an article assessing the state of institutional theory, Scott (1987: 510) admits that it "is at an early stage of development." He identifies four vantage points from which to analyze institutional effects on organizations: (1) institutionalization as a process of instilling value; (2) institutionalization as a process of creating reality; (3) institutional systems as a class of elements; and (4) institutions as distinct societal spheres. No relative weight is attached to these four approaches, thus implying that institutional analysis can partake of any and all of these perspectives in seeking explanations for organizational structures, practices, and performance.

In the very same year in which Scott wrote his assessment of this theory, Zucker (1987: 460) wrote hers, in which she concluded:

society
sub-units
societal spheres
institutions

We would all benefit from an institutional theory that is much more precise: (a) It must make explicit such starting assumptions as how stable and coherent the social system is; (b) it must be definitionally tighter, and should limit the use of underspecified terms such as "norms" and "myths"; (c) the link between institutional elements and their consequences must be specified—and tested—in more detail; and (d) the line between what is institutional and what is not needs to be drawn much more clearly, so that institutional theory is falsifiable.

In a more recent assessment, DiMaggio and Powell (1991) distinguished between "new institutionalism" and "old institutionalism." While presenting an elaborate theoretical rationale for the significance of the distinction between old and new institutional theory, however, they do not address the critical problems raised by Zucker.

Small wonder, then, that some empirical studies seeking to test how institutional environments shape organizational structures and practices suffer from ambiguity as to how those effects are achieved. Perhaps the most convincing empirical support for institutional theory is the study by Edelman (1990) of the effect of the legal environment on the expansion of due process rights on nonunion companies. The Civil Rights Act of 1964 and President Johnson's Executive Order 11246 in 1965 directly addressed the problem of employment discrimination and fair treatment of employees. These developments brought into question the legitimacy of the prevailing pattern of personnel practices and generated normative pressures for change. By institutionalizing due process protections, nonunion companies were able to reestablish their legitimacy. What is more, Edelman addresses the problem of the mechanism whereby the legal environment affected organizations. She presents evidence for the hypothesis that the creation of new personnel offices (which are boundary-spanning units) affects the rate at which organizations institutionalize nonunion grievance procedures.

By contrast, the study by Tolbert and Zucker (1983) on the diffusion of civil service reform does not demonstrate empirically the institutional sources of organizational changes. In their study of 167 cities from 1880 to 1935, they found that such variables as percentage of foreign born, percentage illiterate, city age, and city size predict adoption of civil service procedures until 1914 but not thereafter. They infer that once the diffusion process is underway, it becomes institutionalized.

A similar problem arises with the study of the evolution of modern personnel administration in U.S. industry by Barron, Dubbin, and Jennings (1986). Although bureaucratic employment practices arose early in the twentieth century, the diffusion of such innovations was accelerated during World War II when government agencies, such as the War Production Board, mandated specific employment relations in order to further the war effort. After the war, these employment innovations "became institutionalized and gradually diffused to other firms and industries, owing largely to the activities of personnel professionals" (Barron *et al.*, 1986: 373). This explanation is quite plausible, but it is not empirically demonstrated.

In Chapter 14 of this book, the analysis of R&D consortia provides an example of the impact of the legal environment on the formation of a novel type of organizational form in the United States. Unlike Japan and Western Europe, antitrust law in the United States prohibited collaboration among competitors. To enhance the competitive position of American industry, Congress passed the National Cooperative Research Act (NCRA) in 1984, permitting R&D efforts at the precompetitive stage of research. As of 1992, over 200 R&D consortia have been established (Gibson and Smilor, 1992: 255–267).

From an institutional analysis perspective, it is noteworthy that with the founding of perhaps the first American R&D consortium—the Microelectronics Computer Technology Corporation (MCC)—it became apparent to its top executives that it was running the risk of being prosecuted for violation of the Sherman Antitrust Act. To counter this threat, MCC lobbied Congress for protective legislation, resulting in the passage of the NCRA. MCC's strategy bears out an important observation by Jepperson (1991: 146): "Institutions are not just constraint structures; all institutions simultaneously empower and control." Organizations, especially those with huge resources, such as some multinational corporations, are not passive recipients of pressures from institutional environments; they have the wherewithal and capability of exerting pressures, particularly via the political and legal institutions, to enhance their well-being.

In short, as the concepts and propositions of institutional theory are further refined, the body of empirical research supporting its predictions will probably grow apace.

Transaction-Cost Economics

The transaction-cost theory addresses the problem of organization-environment relations from an interdisciplinary perspective that bridges economics, organization theory, and contract law (Williamson, 1979: 261; 1981b: 573; 1990: 172). First formulated by Coase (1937) as a new framework for analyzing the transactions of the firm, it languished for several decades largely because of the failure by economists to operationalize transactions (Williamson, 1988: 65). For over two decades, Williamson has sought to develop a testable theory of transaction-cost economics. He refers to this effort as "the new institutional economics [which] is preoccupied with the origin, incidence, and ramifications of transaction costs" (Williamson, 1979: 233).

Taking the transaction as the basic unit of analysis, an idea first advanced by Commons (1924, 1934), Williamson (1981a: 1544) states that "a transaction may be said to occur when a good or service is transferred across a technologically separable interface. One stage of processing or assembly activity terminates and another begins." Assuming that firms seek to economize on transaction costs, Williamson thus seeks to compare the transaction costs of a firm in exchanges through the market with those that occur within the firm, or in other words, market transactions versus hierarchical transactions. The impetus for this analysis are the phenomena of "market failure," on the one hand, and "organizational

failure," on the other (Williamson, 1975; 1979: 114–122). In addition, Chandler's (1977) influential study of the transformations of the modern corporation, in which he argued that the "visible hand" of the corporation replaced the "invisible hand" of the market, underscores the importance of the transaction focus of the new institutional economics.

The two underlying assumptions of transaction-cost economics are bounded rationality and opportunism. Participants in transactions, unlike "economic man," have limited cognitive capacity for formulating and solving complex problems and for processing information. "But for bounded rationality, all economic exchange could be efficiently organized by contract. Given bounded rationality, however, it is impossible to deal with complexity in all contractually relevant respects. As a consequence, incomplete contracting is the best that can be achieved" (Williamson, 1981b: 553–554). The other assumption that affects economic exchange is motivational in nature. Some participants in transactions, whether principals or agents, are opportunistic, viz., given to dishonest and guileful behavior. How do corporations protect themselves against bounded rationality and opportunism? "Taken together, the overall import of bounded rationality and opportunism for transaction-cost economics is this: organize transactions so as to economize on bounded rationality while simultaneously safeguarding the transactions in question against the hazards of opportunism" (Williamson, 1990: 191).

With these assumptions as a point of departure, Williamson (1979: 235, 239) undertakes to "dimensionalize" transactions and governance structures, which he defines as "the institutional framework within which the integrity of a transaction is decided" or "the institutional matrix within which transactions are negotiated and executed." He identifies three critical attributes of transactions: "(1) the frequency with which transactions recur; (2) the uncertainty to which transactions are subject; and (3) the degree to which transactions are supported by durable, transaction-specific investments" (Williamson, 1981b: 1546). He attaches special weight to the third attribute, "asset specificity," which he defines as "the degree in which an asset can be redeployed to alternative uses and by alternative users without sacrifice of productive value" (Williamson, 1988: 70). In an early formulation, he cited three types of asset specificity: site specificity, physical asset specificity, and human asset specificity (Williamson, 1981a: 1546); in a recent analysis, he adds three other types: brand name capital, dedicated assets (investments made at the request of a particular customer), and temporal specificity, "in which timely responsiveness by on-site human assets is vital" (Williamson, 1991: 281–282).

As for governance structures, Williamson distinguishes three types: market, hybrid, and hierarchy or firm. The intermediate, or hybrid, mode of transaction includes long-term contracts, franchising, joint ventures, and other forms of nonstandard contracting (Williamson, 1988: 73). Each type of governance structure, Williamson (1991: 271–276) hypothesizes, is supported by a different type of contract law: market-classical contract law, hybrid-neoclassical contract law, and hierarchy-forgiveness contract law. The last relationship warrants

some elaboration: "The implicit contract law of internal organization is that of forbearance. . . . Access to the courts being denied, the parties must resolve their differences internally. Accordingly, hierarchy is its own court of ultimate appeal" (Williamson, 1991: 274).

On the basis of these distinctions, Williamson (1988: 73) asserts that transaction-cost economics is concerned with establishing a "discriminatory match between transactions and governance structures." With efficiency as a primary focus, this theory generates a research agenda that addresses such problems as which activities should be performed within a firm and which outside the firm, and how the operating parts of a firm should be related to one another—whether, for example, a firm should select a unitary functional organization, a multidivisional structure, or a holding company structure (Williamson, 1981b: 549).

How do the transaction costs vary among firms with different internal structures? (See Table I.5.) Among the testable propositions that have been derived are the following:

Hierarchical transaction costs tend to be lower than market transaction costs under conditions of high asset specificity, high uncertainty, and high frequency.

Governance structures (market, hybrid, and hierarchy) that have lower transaction costs will eventually displace those with higher costs.

Table I.5 An Overview of Transaction-Cost Economics

Key Concepts	Transaction Market transactions Hierarchical transactions Transaction costs Governance structure Bounded rationality Opportunism Asset specificity Uncertainty Frequency
Major Assumption	Firms seek to economize on transaction costs.
Unit of Analysis	Transaction
Key Propositions	Hierarchical transaction costs tend to be lower than market transaction costs under conditions of high asset specificity, high uncertainty, and high frequency. Governance structures (market, hybrid, and hierarchy) that have lower transaction costs will eventually displace those with higher costs.
Problem Areas	What are the transaction costs under the market, hybrid, and hierarchy modes of governance structures? How do the transaction costs vary among firms with different internal structures (unitary, multidivisional, conglomerate, etc.)?

Teece (1984: 89), in an effort to apply transaction-cost economics to a number of strategic management issues, has formulated certain propositions concerning "the degree to which a firm should integrate (backward, forward, lateral, multinational, and conglomerate) and the appropriate internal structure for the large enterprise."

To what extent have some of the predictions of transaction-cost economics been borne out? One of the earliest studies is by Monteverde and Teece (1982) on the role of asset specificity in the decision to make or buy automobile components by Ford and General Motors. Their hypothesis is as follows: "The greater is the applications engineering effort associated with the development of any given automobile component, the higher are the expected appropriable quasi rents, and therefore, the greater is the likelihood of vertical integration of production for that component" (Monteverde and Teece, 1982: 207). Their findings supported the proposition that asset specificity determines the choice between vertical integration and market procurement.

A related study by Masten (1984) of the make-or-buy decisions of an aerospace company pertains to the components of a large system under contract for the government. He, too, finds that asset specificity affects the choice between vertical integration and market procurement. In addition, he also observes that the more complex the components and hence the higher the cost of writing a complete contract, the more likely it is that vertical integration is chosen.

Yet another study of a make-or-buy decision, in this case of an automobile company and its supplier relations, to test a number of transaction-cost hypotheses yielded results that are inconclusive: "In general, the effect of transaction costs on make-or-buy decisions was substantially overshadowed by comparative production costs" (Walker and Weber, 1984: 387).

In a subsequent study of a decentralized manufacturing company, Walker and Poppo (1991) compare the impact of asset specificity on the transaction costs of an interunit supply relationship *within* a firm with the corporation's relationship with single-source suppliers. They found that "supplier asset specificity within the corporation is associated with lower transaction costs than asset specificity in the market" (Walker and Poppo, 1991: 82). However, the problem of in-house coordination in multidivisional firms raises questions about the role of asset specificity in lowering transaction costs as compared with relations with suppliers in the market. In other words, the governance structure of multiple profit centers of a decentralized firm is not as different, as the theory predicts, from the hybrid market of single-source suppliers of the corporation. This observation supports the criticism by Eccles and White (1988) in their qualitative study of inter- and intrafirm transaction costs in multi-profit center firms. They found that transaction costs *within* the firm may exceed the costs of market transactions of the firm.

There is no question that developments in transaction-cost economics have stimulated a substantial amount of research interest among economists and a good deal of interest among organizational researchers (Barney and Ouchi, 1986; Robins, 1987). It is also very likely that future research will produce new insights about factors influencing transaction costs of firms versus markets.

It is also reasonable to infer from the past decade of research that Williamson's conception of the scope of relevance of transaction-cost economics for organization theory is not likely to be fulfilled. Although Williamson (1981b: 573) acknowledges that "transaction cost reasoning probably has greater relevance for studying commercial than noncommercial enterprise," he nevertheless asserts its applicability to "all forms of organizations." Yet it is not at all apparent how transaction-cost economizing can be applied to such noneconomic organizations as the political, religious, legal, and scientific. On at least two recent occasions, Williamson (1990: 200; 1991: 573) has forecasted the emergence of a "new science of organization" based on an interdisciplinary union of economics, organization theory, and law. Although it is doubtful whether the logic of transaction-cost economics can be generalized to all types of organizations, Williamson's sustained efforts at interdisciplinary integration may serve as a model for others—including those who do not subscribe to his theory—to emulate his efforts.

Organizational Ecology

In several respects, the organizational ecology theory of organization-environment relations represents a fundamental paradigm shift when compared with the other five theories considered in this chapter. Borrowing elements from biology, demography, and sociology, the population ecology of organization seeks "to understand the forces that shape organizational structures over long time spans" (Hannan, 1991: 3). Unlike the other five theories, its point of departure is a macro-perspective. Its unit of analysis is not the *individual* organization but rather a *population of organizations*; and departing from the *normative* perspective of most organization theories, it in effect advocates a *positivist*, or descriptive, approach to organizations. According to this theory, the principal source of organizational change is not adaptation or strategic choice by decision-makers but environmental selection (Carroll, 1988: 2). New organizational forms evolve, and if they fit into a niche, they are selected by the environment.

From the mid-1970s to the present, organizational ecology has undergone a significant evolution. Its theoretical orientation has been enlarged to include a focus on population dynamics as well as on environmental dynamics; its research agenda has broadened from a national to a cross-national strategy; and it has attracted a growing number of adherents who appear to constitute a community of researchers.

Although an early formulation of this theory appeared in a review article by Aldrich and Pfeffer (1976), its principal architects are Hannan and Freeman (1977b), who characterize it as "a radical alternative to the prevailing theories of organization" (Hannan and Freeman, 1989: 34). Hawley (1950, 1968), whose work on human ecology was a source of inspiration to these authors, observes:

The terms population ecology and organizational ecology are closely akin. The former was introduced by bioecologists who turned their attention from a typological

to a quantitative approach to their field of study. The questions raised concerned various aspects of the relations of populations to environmental carrying capacity. Population ecologists found the Lotka-Verhulst equations to be a useful way of modeling their problems.

Organization ecology is an adaptation of the population ecology model to populations of organizations. Environment in this case is the set of interrelated organizational populations, together with the conditions they engender, constituting an ecosystem. The relation of a population to its environment is expressed in terms of a small number of concepts, some carried forward from population ecology, some developed to fit the characteristics of organizational populations. Central to the theory is the niche concept, defined as resource space and regarded as a variable property of environment. (Hawley, 1988: xiii-xiv)

By tracking the vital rates of an organizational population—namely, organizational foundings and mortality rates—and modeling their growth and decline, Hannan and Freeman and others were content for a while to focus on population dynamics. In a great variety of empirical studies, Hannan and Freeman (1989) and Carroll (1988) were among those who have applied the theory to various organizational populations including restaurants, newspapers, labor unions, voluntary social service organizations, and breweries. As set forth in their comprehensive review of the empirical literature, Singh and Lumsden (1990) document a number of recurrent empirical regularities:

Organizational density, that is, the number of organizations in a population, has a nonmonotonic effect on founding rates.

Young or new organizations and small organizations tend to have a high mortality rate (i.e., the liability of newness and smallness).

Organizations tend to become increasingly structurally inert with age.

Organizational mortality rates tend to decrease with age.

The level of structural inertia tends to increase with organizational size.

The sheer number of empirical studies undertaken and their consistent findings have contributed to the popularity and persuasiveness of the theory (see Table I.6).

A noteworthy recent trend is a deliberate effort to include institutional variables in ecological research, thus establishing a bridge between organizational ecology and institutional theory (Singh and Lumsden, 1990: 182-184). In a study of a local newspaper industry in California, Carroll and Huo (1986) found that institutional variables, particularly political turmoil, affected the rate of foundings and deaths of newspapers. And Tucker, Singh, Meinhard, and House (1988) focus on the impact of institutional changes on the founding and mortality rates of voluntary social service organizations. More specifically, they

Table 1.6 *An Overview of Organizational Ecology*

Key Concepts	Organizational form Organizational density Organizational founding Organizational mortality Liability of newness Niche Structural inertia Environmental selection
Major Assumptions	Organizational forms that fit into a niche tend to survive.
Unit of Analysis	Population of organizations
Key Propositions	Organizational survival is the result of environmental pressures that differentially select fit forms for retention in an organizational population. Some empirical regularities pertain to: 1. nonmonotonic effects of organizational density on founding and failure rates 2. high mortality rates of young or new organizations that decrease with age 3. high mortality rates of small organizations 4. conditions at founding that imprint rates of failure and of change in organizations 5. both failure and founding rates that differ systematically by organizational form
Problem Area	What factors in the environment are associated with birth and death in a population of organizations?

inquired into

the role of the state, particularly as expressed through changes in government policy and programs. By how it allocates resources, adjusts tax laws, and selects between different mechanisms of benefit distribution, the modern state establishes conditions that can either stimulate organizational creation or death. (Tucker *et al.*, 1988: 131)

In a study of nine newspaper populations in three countries, Carroll and Hannan (1989) test a density-dependence model of founding and mortality rates. They concentrate on “the density-dependent processes of legitimation and competition. We do so because these two processes are the main mechanisms of change in two of the most vigorous strands of contemporary organization theory: institutional theory . . . and ecological theory” (Carroll and Hannan, 1989: 525). Rather than measuring legitimation and competition directly, they infer “the operation of these processes from estimates of parameters of models of density dependence” (Carroll and Hannan, 1989: 527). Their findings provide general support for the model: the founding and mortality rates in all nine newspaper populations are nonmonotonic functions of organizational density; however, the expected pattern was not statistically significant in all nine populations. In addition, Carroll and Hannan (1989:536) claim that their findings also support their predictions regarding the effects of legitimation and competition

on founding and mortality rates: "the pattern of effects suggests that legitimation affects both founding rates and mortality rates strongly, but that competition has more powerful effects on founding than on mortality."

It is this conclusion that prompted Zucker (1989: 542–545), a proponent of institutional theory, to criticize Carroll and Hannan for failing to provide an empirical measure of the construct of legitimation and for omitting the "historical context" for a model of organizational founding. She goes even further in asserting that "we know no more about the effects of legitimation on founding after reading the Carroll and Hannan paper than before" (Zucker, 1989: 544). In a related study on the effect of density dependence on organizational mortality, Petersen and Koput (1991) also criticize Carroll and Hannan for not directly measuring legitimation, arguing that the decreasing part of mortality rates can be explained by unobserved heterogeneity in the data.

These criticisms bring to the fore some unresolved conceptual and methodological problems of organizational ecology. Young (1988) and others have raised questions about the ambiguity of core concepts of the theory such as *niche*, *organizational form*, and the *population level of analysis*. All of these criticisms have been systematically rebutted (Freeman and Hannan, 1989; Brittain and Wholey, 1989), and yet doubts linger.

Although the claim has been reiterated that organizational ecology will link up with central issues of sociology and that it will increase "the value of organizational research to work on macrosocial change" (Carroll and Hannan, 1989: 527), it is not at all apparent how the vast and growing body of research is contributing toward this objective. For one thing, the organizational populations the researchers have chosen to study are not central or pivotal organizations in the political economy of industrialized societies.¹ They do not, for example, include any major corporations, political parties, major universities, or military institutions. Second, one of the reasons such peripheral organizations as restaurants, local newspapers, and breweries have been studied is the availability of *archival data* over a substantial period of time. Does this suggest that organizational ecology is in actuality "data driven" rather than "theory driven"? Third, if one is interested in discovering mechanisms of social change at the macro-social level, as Hannan and Freeman (1989: 3–7) state they are, an entirely different theory and research strategy may be called for, namely, the mapping of networks of organizational power and their role as agents of social change (Scott, 1991; Burt, 1983).

Carroll (1988: 6) has issued a vigorous challenge to proponents of rival theories of organizations: "Obviously, when compared to the other three theoretical perspectives on organizations—transaction-cost economics, institutional environments, and resource dependence—organizational ecology shows the greatest generality. . . . Advocates of the other theories would do well to take heed." He confidently predicts that research in organizational ecology is evolving in the

¹ McKelvey (1992: 31) urges organizational ecologists to "wean themselves from the frequently weak proxy measures and archival data based on what many observers believe are trivial populations, such as: rural telephone companies, Argentine newspapers, ancient New York insurance companies, rural Italian cooperative banks, minimalist trade associations, and so forth. . . . What does population ecology have to say about important populations today?"

direction of increasing level of aggregation, from the population level to the community ecology level, which means examining “interrelationships among populations and how they evolve over time” (Carroll, 1988: 6). Hannan and Freeman (1989: 337–338) clearly agree with Carroll’s prediction, and Singh (1990: 317) asserts that work on community ecology is one future research direction in organizational evolution. However, one might well wonder whether greater generality is being bought at the price of substantive meaning by treating organizations as disembodied entities with the aid of Lotka-Verhulst and hazard models.² For this reason, none of the chapters in this book is based on the theory and methodology of organizational ecology.

In stark contrast, Chandler (1962), in his classic historical study of four major corporations, has made an enduring contribution to our understanding of strategy, structure and innovations in organizations. Is it conceivable that a countertrend may yet develop in organizational ecology research, namely, in the direction of *disaggregation* to the level of the individual organization? Two noteworthy examples of this possible trend are Bidwell and Kasarda’s (1985) ecological study and Burgelman’s (1991) intraorganizational ecological study of corporate strategy at Intel Corporation.

At the individual organizational level, there are ample opportunities for applying organizational life cycle stages (Kimberly, Miles and Associates, 1980), for using organizational demography (Stinchcombe, McDill, and Walker, 1968; Pfeffer, 1983) and for developing analytically based organizational histories (Chandler, 1991: 342). If such a trend in organizational ecology were to develop, it might make a salient contribution to our understanding of organizational dynamics as well as environmental and societal change.

IMPLICATIONS FOR MANAGERIAL ROLES AND ORGANIZATIONAL DESIGNS

Having briefly reviewed the concepts, assumptions, propositions, and problems of each of the six theories of organizations and assessed the relevant empirical data, I would now like to consider the pragmatic utility of each theory, which means its implications for managerial roles and organizational design.

Table I.7 summarizes the pragmatic consequences of each theory. With the exception of the theory of organizational ecology, each theory, either implicitly or explicitly, sets forth ideas for organizational design, and each theory, again either implicitly or explicitly, articulates an image of a managerial role. In characterizing a theory’s concept of the managerial role, I have distinguished

² In the field of demography, Lotka’s equation describes the relationship between a population’s fertility and mortality rates and its growth rate and age distribution. The equation holds for a population in which the fertility and mortality rates are held constant. The Verhulst-Pearl logistic equation describes the growth of a population in which the total population size is constrained by the environment. Hazard models are statistical models that can be used to study differences in the survival rates of various characteristics of organizations.

Table 1.7 *Organizational Design and Managerial Role Implications of Alternative Theories of Organization*

<i>Theory</i>	<i>Managerial Role</i>	<i>Organizational Design</i>
Weber's theory of bureaucracy	Reactive	Adapt organizational structures and policies to changing circumstances
Open systems theory	Proactive	Change organizational inputs, throughputs, and outputs
Resource dependence theory	Proactive	Initiate changes in types and degrees of resource dependence on external organizations
Institutional theory	Active	To increase organizational legitimacy, adapt the organization to changes in the environing social institutions: legal, economic, familial, religious, political, educational, etc. Lobby for changes in legal and political institutions
Transaction-cost economics	Proactive	Decrease transaction costs by recourse to governance structure of hierarchy rather than market
Organizational ecology	Inactive	Environment is given, and hence there are no implications for organizational design.

degrees of activism on a hypothetical scale of zero to three, with an inactive managerial role equal to zero, a reactive role equal to one, an active role equal to two, and a proactive role equal to three.

The environmental selection assumption of organizational ecology in effect provides no opportunity for organizational decision-makers to affect the fortunes of an organization; hence here I characterize the managerial role as inactive. On the other hand, the theories of open systems, resource dependence, and transaction-cost economics all posit an adaptive strategy, which leads me to attribute a proactive role to management. The emphasis in institutional theory on the impact of institutional environments on organizations in effect underscores the constraints on organization; hence here I assign an active—as distinct from proactive—role to management. Finally, Weber's rational-legal theory of bureaucracy constrains all personnel, including top decision makers, to comply with existing policies, rules, and regulations. Although it is not impossible for organizational elites in bureaucracies to initiate policy and rule changes, it is a slow and uncertain process; hence I characterize the managerial role in a bureaucracy as reactive.

In terms of organizational design implications, each of the theories, except for organizational ecology, assumes an adaptive strategy on the part of organizational elites. To be sure, there are differences in degrees of constraints on organizational design decisions; these differences are correlated with the degree of activism of managerial roles. Thus, the theories of open systems, resource dependence, and transaction-cost economics lend themselves to more comprehensive organizational design changes partly because of the proactive role of management. The organizational design implications of institutional theory are somewhat more limited, and even more so for Weber's bureaucracy theory.

Finally, the environmental selection presuppositions of organizational ecology generate no implications for organizational design decisions.

GOVERNANCE STRUCTURES: FROM MANAGERIALISM TO AGENCY THEORY TO STAKEHOLDER THEORY

Of the six theories briefly assessed only one, transaction-cost economics, deals explicitly with governance structures. Like the other key concepts of this theory, this term is difficult to define. It deals with the type of authority relationship underlying a transaction: whether it is governed by hierarchy or market. Hence, in approaching major corporate decisions, does top management rely on the authority system of the hierarchy of the organization or on the invisible hand of the market? More generally, corporate governance refers to the structure of authority and decision-making at the apex of an organization (Weiss, 1978). There are at least three corporate governance theories: managerialism, agency theory, and stakeholder theory.

Managerialism

In a landmark study, Berle and Means (1932) advanced the thesis that the corporation as it developed toward the end of the nineteenth century and in the twentieth century has undergone a major transformation, namely a separation of ownership and control. No longer do entrepreneurs own as well as control a corporation; instead there has been an enormous proliferation of shareholders and the emergence of professional management that controls the corporation (Chandler, 1977).

This thesis was the point of departure for Burnham's (1941) theory of the "managerial revolution." The conflict between the economic systems and ideologies of capitalism and socialism, argues Burnham, will not result in a victory for either system or ideology. Instead, a new system, managerialism, has arisen, which will eventually replace both contending systems. Managers who control the decision-making process in capitalist as well as in socialist countries are emerging as a new historical social class with an identity and a set of interests quite distinct from those of workers, entrepreneurs, and political leaders. Possessing the knowledge and power to run industry, managers will eventually become a new ruling class that will dominate societies worldwide.

Although Burnham's theory has been partially borne out by developments in the East as well as the West, it has not resulted in a revolution replacing capitalism. It has, however, led to efforts to control the discretionary power of managers via agency theory.

Agency Theory

Unlike Williamson's (1965b) theory of managerial discretion, which underscores the tendency of various levels of personnel in the corporate hierarchy to be op-

portunistic and promote their self-interests at the expense of corporate interests, agency theory is concerned with regulating the behavior of agents, namely, managers, vis-à-vis their principals, namely, shareholders. Acknowledging the possibility that managers can fail to act on behalf of the interests of shareholders, the proponents of this theory seek to regulate the principal-agent relationship through the mechanism of the contract. They build into the organization disincentives for managers to deviate from their fiduciary obligations by establishing monitoring programs and salary incentive systems (Eisenhardt, 1989). This theory and the regulatory mechanisms proposed attempt to cope with the historical fact—first observed by Berle and Means (1932)—that there is a separation of ownership and control in the modern corporation. Whether agency theory in fact is successful in achieving this regulatory effect is an empirical question, although, as is noted in Chapter 20, there is reason to be skeptical that it has the desired effect of ensuring that managers act on behalf of the interests of corporate owners.

Stakeholder Theory

The stakeholder theory rejects the assumptions of agency theory, on the one hand, and seeks to address the challenge of managerialism, on the other. As I indicate in Chapters 19, 20, 21, and 23, this theory denies that managers are the agents only of shareholders and that shareholders are the exclusive principals of the corporation. Instead, it contends that there are multiple principals as well as multiple agents. To respond to the threat of managerialism, which can potentially undermine capitalism, stakeholder theory argues that the corporation, as a legal creation of the state, has a public welfare function to perform, that is, to promote the interests of *multiple* constituencies with a stake in the future of the corporation. At the very least, as I point out in Chapter 19, six types of stakeholders of the corporation can be identified: shareholders, employees, customers, suppliers, the local community, and management. According to this theory, the board of directors should be composed of representatives of each of these six stakeholders, and the principal function of management is to resolve conflicts among stakeholders, using as the guiding principle: What will promote the well-being of the corporation as a whole?

Yet another unique feature of this theory of governance is that it rests on a pluralistic theory of power and thus provides an antidote to Michels' (1949) "iron law of oligarchy."

CONCLUSION

Each of the six theories reviewed in this chapter has its strengths and weaknesses. None can claim to be a *comprehensive* or *universal* theory in the sense that it can address all conceivable organizational problems and that it can be applied to all types of organizations regardless of time and space. Because of differences

in scope, unit of analysis, and disciplinary genesis, it is difficult to overcome the problem of incommensurability and thus test the relative empirical validity of these theories, given a common question or point of departure.

The challenge to organization theorists in the years ahead is twofold: The first is to build bridges across these separate theories so as to develop an *integrative* theory of greater predictive power. Some efforts along this line are already underway, such as Baum and Oliver's (1991) study linking institutional theory with organizational ecology. The second challenge is to develop a fundamentally new theory of organization with greater predictive power and with greater utility for organizational design than any of the six theories. There is a dawning realization that current organization theories are inadequate to cope with ongoing transformations of organizations. In fact, some of these theories may actually serve as blinders or Procrustean beds. Hence, there is a need for new conceptualizations to match observable developments, whether they be the emergence of new interorganizational alliances, such as R&D consortia, the globalization of business enterprises, or the like. The editors of the new journal *Organization Science* articulated this challenge well when they said: "If our field's best efforts can employ no-holds-barred approaches to new knowledge, if the richness and breadth of our studies can keep pace with the world of organizations, then organization scholars are on the threshold of a wonderful adventure, an adventure that will be comparable in import to the organizations we investigate" (Daft and Lewin, 1990: 8).

PART I

HIERARCHICAL STRUCTURES

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The Law of Organizational Hierarchy

The pyramid as a model of organizations has long captured the imagination of managers as well as theorists of organizations. Whether the metaphor harks back to the early history of armies, empires, or organized religion is still unclear. However, it is evident that the imagery of a pyramidal organization is so widespread that organizational hierarchy tends to be regarded as inevitable. Some would even consider it an iron law—no less coercive than Michels' (1949: 393–409) “iron law of oligarchy”—which, if violated, results in severe penalties to the effectiveness of an organization.

Weber's (1947a, b) theory of bureaucracy postulates a hierarchical structure. Simon (1969: 84–90) generalizes and extends this concept to social as well as natural phenomena. And Mintzberg (1980) advances a classification of five types of organizational structures: simple structure, machine bureaucracy, professional bureaucracy, divisional form, and adhocracy. Underlying all five types is a hierarchical structure. In a study comparing the perceptions of control in a sample of enterprises in five countries (Italy, Austria, Yugoslavia, Israel, and the United States), the authors conclude that “authority and influence are . . . inevitably hierarchical in the work organization, egalitarian ideology notwithstanding” (Tannenbaum *et al.*, 1974: 209).

How can organizational hierarchy be conceptualized and measured? What are the causes and consequences of organizational hierarchy? Under what conditions is the degree of organizational hierarchy reduced? In Chapter 1, three dimensions of the hierarchy of industrial organizations are identified: hierarchy of skills, hierarchy of authority, and hierarchy of rewards. In addition, several hypotheses are formulated concerning the causes and consequences of organization hierarchy.

Is there an “iron law of organizational hierarchy”? A postulate common to both organization theory and the structural-functional theory of social stratification is that hierarchical organization is functionally necessary. An alternative formulation of this postulate—which is probably more heuristic—is that different degrees of hierarchical organization have different consequences for total and partial social systems. Unlike the functional-necessity postulate, which takes hierarchy as a “given” and as a universal “iron law,” the modified postulate directs attention to the problem of empirically establishing what degree of variation in fact exists in the hierarchical structure of organizations (Barber, 1957: 87–93; Merton, 1957a: 315).

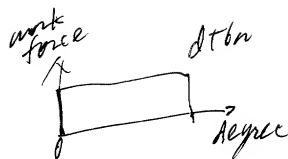
In order to inquire into this question—say, in industrial organization as one type of formal organization—it is, of course, necessary to have measures of hierarchical structure. If, with the aid of such measures, organizations are found to exhibit considerable variation in the degree of hierarchy—as seems likely—it would make possible a study of (1) the causes and organizational consequences of the degree of hierarchy; (2) the direction and degree of change of this structural property of industrial organizations; and (3) the degree of hierarchy among different types of organizations and in different societies. The purpose of this chapter is to develop and document some indices of the hierarchical structure of industrial organizations that might facilitate this line of inquiry.

SOME INDICES OF HIERARCHICAL STRUCTURE

Of central importance to organization theory and to theories of social stratification is the problem of differential allocation of tasks, rewards, and authority. How tasks are allocated affects goal attainment; how rewards are allocated affects motivation of personnel and commitment to organizational goals; and how authority is allocated affects integration, coordination, and communication in an organization. For our purpose we will consider nine possible indicators of these three structural dimensions: two for the hierarchy of skills, one for the hierarchy of rewards, and six for the hierarchy of authority. This skewed distribution of indicators reflects, in part, the relative complexity of the three structural dimensions. Where possible, these indicators will be illustrated with comparative data drawn from the literature of organization theory.

Hierarchy of Skills

Perhaps the most critical structural variable in terms of its organizational consequences is the hierarchy of skills. The measurement of skill presents various complexities. One possible measure that is deceptively simple is the length of time spent in relatively formal training—in-plant and/or out-plant—of the manual and nonmanual occupations that constitute a factory. In the limiting case, an organization has a set of specialized tasks all equivalent in degree of skill or



a single homogeneous task performed by all personnel. This type of division of labor would represent a zero degree of hierarchical differentiation of skills.

Several possible shapes of skill distributions of the work force of factories may be identified: for example, a normal curve, a negatively skewed distribution, a positively skewed distribution, a multimodal curve, a U-curve, and a rectangular distribution. In the absence of empirical investigation and pertinent theoretical propositions, the organizational consequences of these and other possible distributions are not apparent. We may conjecture, though, that a rectangular distribution probably signifies a relatively low degree of skill differentiation. The skill classes—as measured, for example, by training time—in the case of a rectangular distribution have an equal proportion of employees; in other words, the ratio of the relative frequencies in adjacent skill classes is 1:1. The degree of deviation from such a distribution might prove to be a measure of the degree of hierarchical differentiation of skills.

Another indicator of this dimension of hierarchy is the spread of the percentage distribution of skill or training-time levels. The interquartile range, or the difference in the number of skill or training-time levels between the upper 5 percent and the lower 5 percent of the distribution—which may be more appropriate for the problem at hand—would yield a measure of the hierarchy of skills in a single industrial organization or a sample of industrial organizations.

Hierarchy of Rewards

The second structural variable, the hierarchy of rewards, has been traditionally accorded more weight than the hierarchy of skills. Inequality of rewards is a recurrent source of industrial conflict, which is not to say that equality of rewards does not give rise to conflict (Jaques, 1956; Lipset and Trow, 1957). The most readily quantifiable measure of the hierarchy of rewards in a factory is, of course, a comparison of the salaries and wages received by people in different statuses. This measure has the disadvantage of omitting fringe benefits and a great variety of perquisites that, in the case of executives, may amount to more than the base salary. Two simple ratios, nevertheless, crudely register the degree of inequality of rewards: the ratio of maximum-minimum earnings, or the range of earnings in a factory that is the ratio of the salary of the general manager or president to the average wage of a worker in the lowest skill category; and the salary ratios of adjacent statuses such as foremen/workers and supervisors/foremen. *complete pay*

Unfortunately, data on earnings of the gamut of occupational categories of a factory have rarely been reported in the literature (Scott *et al.*, 1956: 195–196, 297–298). In the British Glacier Metals Company the maximum-minimum earning ratio is 20:1.¹ In two Yugoslav factories—a textile mill and an electrical motor plant—that I visited in 1959, the maximum-minimum earning ratios were 4:1 and 6:1, respectively. About Japanese factories in general, we are told that the “difference between managers’ and workers’ wages as paid in cash is not

¹ Computed from data in Jaques (1956: 53).

large"; and in a Japanese metal-processing firm the ratio of earnings of "average staff employees" to "average laborers" is 1.15:1 (Abegglen, 1958: 62–63).²

Given access to wage and salary data—preferably data including the value of perquisites and fringe benefits—for a sample of factories, Lorenz curves could be drawn showing the relationships between the relative size of an occupational or status category and its share of the total earnings. The area between the Lorenz curve and the 45 degree line of equality would provide a measure of the degree of hierarchy of rewards in a factory.

Hierarchy of Authority

The third hierarchical dimension, the structure of authority, is multifaceted. It consists of a body of institutionalized statuses and decision-making rights that range from those vested in top management to those vested in foremen and non-supervisory rank-and-file employees. Because of the inherent complexity of the structure of authority, the six indicators to be presented, although quantitative in character, are crude and imprecise.

The first of these indicators is the span of control, a well-known managerial concept.³ Since the span of control may vary from echelon to echelon, different measures might be obtained such as the ratio of foremen/workers, supervisors/foremen, or division managers/department managers (Haire, 1959). In a comparison of an American and a German steel plant virtually identical in size, product, and work force, Harbison *et al.* (1955) found a 1:15 foreman/worker span of control in the American steel plant as compared with a 1:50 ratio in the German counterpart, certainly an impressive difference. The Du Pont Company has even a higher foreman/worker ratio of 1:10 and a supervisor/engineer ratio of 1:7.⁴

The second indicator of authority is simply the number of levels of authority, from top management to workers. How many levels of authority are engaged in making, interpreting, or implementing various decisions? In the Du Pont Company, which has 90,000 employees, there are said to be 13 echelons; in a Japanese radio-communication equipment plant employing about 3,000 persons, there are 9 levels; and in the Endicott plant of IBM with a work force of over 7,000, there are four levels (Richardson and Walker, 1948). It is doubtful whether the number of echelons is merely a function of organization size, although how much it is related to size obviously awaits research.⁵

A third indicator of authority is Melman's ratio of administration to production, which unlike the span of control, takes the entire organization as a unit of analysis instead of a subunit (Melman, 1956: 69–94; Delahanty, 1962: 83–98). The administrative component of this ratio includes staff and line as well as their

² The ratio is computed from data presented in Abegglen, 1958, on page 52.

³ See, for example, Graicunas (1937: 183–187); Suojanen (1955); Urwick (1956); and Meij (1958).

⁴ Personal communication from an official of Du Pont.

⁵ For an incisive analysis of the relation between the size, shape, and function of an organization, see Haire (1959: 272–306).

supportive personnel, such as clerical employees. In the automobile industry, for example, the variation in this ratio is considerable. It ranges from 1:3 in the Ford Motor Company, to 1:4 in Firm X in Britain, to 1:5 in Renault, to 1:6 in the Standard Motor Company in England, to 1:10 in Volkswagen (Touraine, 1955: 165; Melman, 1958: 128, 175, 199).

A fourth indicator of the hierarchy of authority is what Jaques (1956: 23) has called the "time-span of discretion," which he defines as the maximum length of time an employee is authorized to make decisions on his own initiative that commit a given amount of the resources of the organization. What is the ratio of maximum-minimum time-span of discretion from the manager of a factory to the worker in the lowest skill category? Is it larger or smaller than 10 years/one hour, as Jaques found in the Glacier Metals Company in England? This ratio might also be obtained for adjacent statuses, such as foremen and workers, foremen and supervisors, or departmental managers and the general manager (Scott *et al.*, 1956: 98-99).

The fifth indicator of the hierarchy of authority is the degree of centralization in decision making. At what level of authority are certain classes of decisions made? For example, policy making with regard to labor relations may be centralized at the top managerial levels or decentralized at the middle and junior management levels; the authority to purchase capital equipment or to grant salary increases may likewise be centralized or decentralized. By definition, the degree of decentralization is greater the lower the managerial level at which a given class of decisions is made (Dale, 1955: 11). In the few empirical studies of this facet of authority, the one by Baker and France (1954: 195, 201) of 135 American companies found a highly centralized pattern of decision making about labor relations policies.

The sixth and final indicator of the hierarchy of authority is the degree of limitation on the rights of management to make decisions. One mechanism for limiting authority in the legal system is the complex of norms called "procedural due process of law." These are procedural safeguards incorporated in the judicial institutions of legal systems that ensure a fair and impartial trial, thus limiting the decision-making authority of the courts. Such norms as the right to notice of a hearing, the right to confront and cross-examine witnesses, and the right to introduce evidence on one's behalf have partially and gradually been diffused from the sphere of legal institutions to the sphere of economic institutions. In industrial organizations, they have been institutionalized in the form of a grievance procedure with arbitration as the final stage of conflict resolution (Lazar, 1953; Evan, 1959: 5-16). Manual workers employed under a labor-management collective bargaining agreement have been granted the right to appeal the decisions of their superiors through the grievance machinery.

An indicator of this aspect of the hierarchy of authority is the number of echelons for which procedural due process of law has been institutionalized. If it is confined to the lowest echelon, namely, to manual workers, it obviously represents a lower degree of limitation of executive authority than if it encompasses more than one echelon, namely, clerical workers, technical personnel, foremen, supervisors, and junior and middle managers (Evan, 1962a).

One of the few discussions of this aspect of authority in the literature of organization theory is found in Jaques's (1951: 53, 61–62, 325–326) study of the Glacier Metals Company. In that company all employees have the right of appeal to successive stages of executive authority and eventually to the chief executive. And even decisions of the chief executive are subject to appeal to an outside independent tribunal. The latter provision is of critical importance, for otherwise the appeals system augments the authority of higher management over lower management. Jaques does not present data about the functioning of this system of appeals other than to observe that the channels for appeals are often used and that “the appeals system has removed the fears of gross injustice which are so common in industry” (Jaques, 1951: 63; Brown, 1960: 250–273).

EMPIRICAL APPLICATION OF STRUCTURAL INDICES

Some or all of these measures of hierarchical structure can be used, with differing degrees of difficulty, in an empirical study of a sample of industrial organizations. Their use would make possible the answering of as yet unanswered questions about the structure of industrial organizations.

Index Construction

Three indices, each measuring a different aspect of hierarchy, or possibly one composite index—in the unlikely event that the three dimensions of hierarchy are independently related—could be constructed using such measurement techniques as Guttman scaling, latent structure, or some simple weighting scheme. If the reward hierarchy were indexed by a single indicator, it would of course not pose a problem of index construction. However, the multiple indicators of skill hierarchy and of authority hierarchy would pose a problem. An index of authority might be constructed in one of several ways. For example, one procedure would be to test whether the six indicators form a cumulative pattern approximating the Guttman scale model.

Of special interest would be the profiles of a sample of industrial organizations on the three structural indices. The relative position of the organizations on the three indices would provide information as to the degree of hierarchical consistency. Some organizations in the sample may have consistently high or consistently low scores on the three indices, whereas others may have a combination of high and low scores. Ordering a sample of organizations according to the degree of hierarchical consistency is analogous conceptually and procedurally to ordering individuals according to the degree of status consistency.⁶ Thus hierarchical consistency is an additional dimension of the hierarchical structure of factories. It raises new problems for inquiry, for example, do industrial

⁶ “Status consistency” refers to the degree of consistency or inconsistency in the scores or rankings of an individual on some dimensions of one or more of his statuses. See, for example, Lenski (1954), Goffman (1957), and Homans (1962: 91–102).

organizations with hierarchically inconsistent profiles—such as high relative position with respect to the skill hierarchy and low relative position with respect to the authority and reward hierarchies—tend to move toward consistency? If so, through what processes does this occur?

Analysis of Structural Change

With the aid of three indices or a single composite index, it would be possible to study such problems as the direction and degree of change in hierarchical structure over time. This, of course, would entail gathering data for at least two time periods for each of the industrial organizations in a sample. In short, this would require a “panel” study of a sample of factories (Blau, 1957). Short of such longitudinal research, some inferences regarding change in the hierarchical structure may nevertheless be drawn from a cross-sectional study. For example, if the indicators of the authority hierarchy were to form a Guttman scale, a rank order correlation of the authority scores by age of factories might be tentatively interpreted as representing different stages in the evolution of the structure of authority (Freeman and Winch, 1957; Udy, 1958). For some of the indicators of hierarchy, especially the authority dimension, no secular trends may be found. Instead, cyclical trends may be observed, for example, from centralization of decision making to decentralization and thence to recentralization.

Analysis of Causes and Consequences of Hierarchical Structure

The degree of hierarchical structure can be treated as a dependent or independent variable. If it is treated as a dependent variable, the following factors might be explored as possible sources of variation in the degree of hierarchical structure: size of organization, age of organization, degree of mechanization, product diversity, degree of competition or monopoly of the industry from which the sample of factories is drawn, type of ownership (i.e., corporate, nationalized, cooperative, individual, partnership, family enterprise, etc.), level of industrialization of the country in which the factories are located, degree of cooperation in labor-management relations, and the degree of emphasis on equality as a cultural value.

If the hierarchical structure is treated as an independent variable, the following consequences of variation in degree of organizational hierarchy might be considered: level of productivity; rate of profit; rate of growth of organizational norms; growth of diverse types of organizational norms; degree of commitment to organizational goals or degree of organizational loyalty; level of morale as measured, for example, by labor turnover, absenteeism, and accident rates; and rate of social interaction between and within the status categories of an organization.

With a set of such hypothesized causes and consequences of variation in the degree of organizational hierarchy, it is possible to develop empirically testable hypotheses, particularly of the types Lazarsfeld (1959) calls “conditional relations” and “contextual propositions.”

Let us consider two illustrative hypotheses. First, the degree of organizational hierarchy is negatively correlated with productivity when labor-management relations are fraught with a high level of conflict, but this correlation is zero or positive when the level of labor-management conflict is low. Second, the degree of organizational hierarchy is negatively correlated with productivity in oligopolistic or monopolistic industries, but this correlation is zero or positive in competitive industries. In these two illustrations, the unit of analysis is the organization, and the effect of the degree of organizational hierarchy depends on the structural context of the organizations in question. Moreover, a variable other than degree of hierarchical structure acts as the qualifying variable. In the case of the first hypothesis, it is the degree of conflict in labor-management relations; in the second hypothesis, it is the degree of competition within the industry. Let us now consider an hypothesis in which the hierarchical structure is the qualifying variable and the other two variables do not characterize organizations but individuals in the organizations. For example, if length of employment in an organization and commitment to its goals are positively related, it may be conjectured that as the degree of hierarchical structure increases, this relationship diminishes.

All three propositions thus far presented involve conditional relations, that is, they specify the conditions under which a relationship between two variables exists. We turn now to a contextual proposition in which at least one of the three variables in question pertains to both individuals and organizations. Hierarchical consistency, as we have seen, is a measure of an organization's relative position on the three structural indices. Correspondingly, status consistency measures the relative position of an individual on the hierarchies of skills, rewards, and authority.⁷ If we hypothesize that commitment to the organizational goals decreases as the degree of status consistency decreases—and some empirical research makes this a plausible hypothesis—does a decrease in hierarchical consistency intensify or diminish this positive relationship (Goffman, 1957)?

Comparative Study of Hierarchical Structure

A major qualifying variable affecting the impact of organizational hierarchy is the social and cultural structure of the society in which the organizations in question are embedded. We have already alluded to the possible differential effect on the degree of organizational hierarchy of the level of industrialization of a society and of the degree of emphasis on equality as a cultural value. This suggests the need for cross-national research, quite apart from the general importance of developing uniformities in organization theory that transcend a particular society or culture. In addition, the paucity of relevant data in

⁷ It should be noted that the indicators of the authority dimension forming a measure of status consistency would necessarily differ in some respects from those comprising a measure of hierarchical consistency. In particular, only three of the six indicators of authority could be transformed into a measure of status consistency, namely, number of levels of authority, span of control, and time-span of discretion.

various countries, as we noted in our preliminary review, makes such cross-national research desirable.

Through the cooperation of interested researchers in different countries, comparable studies could be designed and conducted of the hierarchical dimension of industrial organizations and conceivably of other types of formal organizations, too, such as universities, hospitals, and the like. Such an inquiry might be organized along lines similar to the survey of teachers' attitudes in seven Western European countries conducted in 1953 under the direction of the Organization for Comparative Social Research (Rokkan, 1954, 1955).

Another form of comparative research would be cross-organizational in character, that is, it would involve comparisons of the hierarchical structures of different kinds of organization (e.g., industrial, educational, military, etc.). More feasible, if not always more significant, than either type of field study are laboratory experiments simulating the hierarchical status relations in factories. Generalizations yielded by such experiments might help to refine those stemming from field studies (Guetzkow and Bowes, 1957; Evan and Zelditch, 1961; Zelditch and Evan, 1962).

CONCLUSION

In this chapter, we modified the functional-necessity postulate of hierarchy underlying both organization theory and the structural-functional theory of social stratification with the assertion that different degrees of hierarchical organization have different consequences for total and partial social systems. This led us to inquire into the problem of measuring the degree of hierarchical structure of industrial organizations. Three central dimensions of organizational structure were selected: the hierarchy of skills, the hierarchy of rewards, and the hierarchy of authority. For each dimension, an attempt was made to develop and document one or more indicators. The question of the empirical application of the indicators of the hierarchical dimensions in turn led us to consider some problems of index construction and analysis of structural change of causes and consequences of variation in degree of organizational hierarchy, and of comparative research, whether cross-national, cross-organizational, or experimental in character.

The explicit or implicit acceptance of an "iron law of hierarchy" is premature in view of the dearth of evidence on the structure of organizations (Meyer, 1947; Boulding, 1953: 79). In the absence of systematic inquiry, many critical questions remain unanswered, such as whether the advance of industrialism inevitably leads to an increase in organizational hierarchy or whether there are counterforces at work tending to reduce the degree of hierarchy. The significance of this question obviously transcends national boundaries. Comparative research on the degree of hierarchical structure of industrial organizations would add to our practical and theoretical knowledge of organizations as well as of systems of social stratification.



The Consequences of Organizational Hierarchy

In this chapter, I introduce a fourth dimension of organizational hierarchy: the distribution of organizational information. That information is crucial for the performance of organizational roles can be taken as an axiom (Stinchcombe, 1990). That information is also indispensable for reducing uncertainties plaguing organizations is not so clearly understood. For this reason I have added the distribution of organizational information to the definition of organizational hierarchy.

I shall formulate a causal model interrelating organizational hierarchy with three variables: work alienation, organizational commitment, and organizational effectiveness. How generalizable is this model? Is it valid for profit as well as nonprofit organizations and for work as well as nonwork organizations? By measuring the degree of hierarchical differentiation in organizations, it is possible to test the widely held assumption that organizational hierarchy promotes organizational effectiveness, that is, that the two variables are positively related.

The problems of organizational hierarchy are bound to concern managers as well as organization theorists for many years to come, in capitalist and socialist countries alike (Bell, 1973: 80). New models are being formulated to counteract some of the dysfunctions of organizational hierarchy. For example, Ackoff's (1974: 50-53; 1989: 11-16) model of a "circular organization" is "intended to maximize opportunities for relevant participation by its members, and, by so doing, better serves its own purposes." The ongoing industrial democracy experiments in Western Europe and the "self-management" systems of Yugoslavia and other countries may be interpreted as groping efforts to diminish the degree of organizational hierarchy (Greenberg, 1986; Teulings, 1987).

Organizational hierarchy is regarded as an indispensable principle not only by executives but also by researchers in organization theory. To most managers, whether in capitalist or socialist countries, the principle of hierarchical structure commends itself as a rational mechanism for ensuring the coordination of diverse functions, the implementation of policies, and the achievement of organizational objectives. A cogent case for the managerial perspective on hierarchy was made by Sir Bernard Miller (1968: 17), the chairman of the John Lewis partnership, a successful profit-sharing company in England:

It is a fact of life that only a tiny minority of people are able enough to manage large-scale affairs and strong minded enough to take decisions that subordinate short-term and sectional interests to the long-term needs of the whole. If the business is to succeed and to continue, the power to settle policy and to take executive decisions at the highest level must be concentrated in the hands of a few people: it cannot be widely shared in industry any more than it can in our political government.

As regards social science researchers on organizations, Weber's model (1947a,b) of a monocratic bureaucracy with its hierarchical structure of offices has had a profound impact on their theory construction as well as their research. In addition, Michels' (1949) compelling formulation of the "iron law of oligarchy" in organizations, ostensibly concerned with promoting democracy, seems to have won wide acceptance among sociologists (Edelstein, 1967: 19). If the "iron law of oligarchy" holds in organizations devoted to advancing democracy, is it not true, *a fortiori*, in organizations concerned with the mundane objective of making a product or rendering a service?

Evidently, executives as well as social scientists assume that hierarchy is a stubborn fact of organizational life and that it is functionally necessary for attaining organizational goals. In other words, they tend to conceive of organizational hierarchy as either a *constant* or as an *imperative*, rather than as a *variable* or as a *constraint*.

DIMENSIONS OF HIERARCHY

In Chapter 1, I concluded:

The explicit or implicit acceptance of an "iron law of hierarchy" is premature in view of the dearth of evidence on the structure of organizations. In the absence of systematic inquiry, many critical questions remain unanswered, such as whether the advance of industrialism inevitably leads to an increase in organizational hierarchy, or whether there are counterforces at work tending to reduce the degree of hierarchy. The significance of this question obviously transcends national boundaries.

In the intervening years there has been a burgeoning of research in various countries on organizational structure and behavior. However, with comparatively few exceptions, such as some of the work of Tannenbaum and his colleagues,

Morse and Reimer, and the Bavelas-type experiments on communication nets, there have not been any direct, systematic, let alone cumulative, tests of the proposition that there is a positive relationship between the degree of organizational hierarchy and the degree of organizational effectiveness.¹

Two kindred organizational principles, having almost the canonized status of organizational hierarchy, are the so-called size-effect and the technological imperative, both of which have been the object of an appreciable amount of research over the years.² As organizations increase in size, do they become more or less hierarchical? Obviously the answer depends on how hierarchy is defined and measured. As organizational technology increases in complexity, do organizations become more or less hierarchical? Again the answer depends on how organizational technology is defined.

Underlying these questions is the hypothesis that size and technological complexity are both positively related to organizational hierarchy. The answers to these questions and a test of the proposition that organizational hierarchy is positively related to organizational effectiveness would clearly have significant implications for organization theory as well as for organization design and, more specifically, for the theories and practices of industrial democracy. Before considering some old and new dilemmas of industrial democracy from the vantage point of organizational hierarchy, I will recapitulate the conceptualization and operationalization of organizational hierarchy that I developed in Chapter 1.

Organizational hierarchy involves at least three modes of unequal allocation of resources: (1) inequality of skills and knowledge; (2) inequality of rewards; and (3) inequality of authority. The heterogeneity of tasks performed in an organization presupposes the availability of personnel possessing the requisite skills and knowledge. Since types of skills and bodies of knowledge vary greatly—one deceptively simple measure of skill differentiation is the length of time required in relatively formal training to perform a task—there is a tendency for occupational differentiation in an organization and in society at large to be viewed in a rank order of prestige and social worth. “In the limiting case, an organization has a set of specialized tasks all equivalent in degree of skill or a single homogeneous task performed by all personnel. This type of division of labor would represent a zero degree of hierarchical differentiation of skills” (see pages 30–31). The actual distribution of skills among the employees of an organization may take various shapes, for example, a normal curve, a negatively or positively skewed distribution, a multimodal curve, or a U-curve.

The second dimension of inequality, the hierarchy of rewards, has received more attention than the hierarchy of skills. If we ignore the variety of nonmonetary rewards associated with employment (such as vacations, health insurance, pensions, and various perquisites), the wages and salaries of employees can be readily measured. Ideally, Lorenz curves can be drawn showing the relationship

¹ Cf. Bavelas (1950); Leavitt (1951); Shaw (1954); Guetzkow and Simon (1955); Morse and Reimer (1956); Smith and Tannenbaum (1963); and Tannenbaum (1968).

² Woodward (1965); Rushing (1967); Ingham (1968); Hickson et al. (1969); Pondy (1969); Blau (1970, 1972); and Meyer (1972a).

between the relative size of an occupational category and its share of the total earnings in an organization, thus providing a precise measure of the degree of hierarchy of rewards (Whisler, 1967). In the absence of data on the distribution of earnings of all employees in an organization or for a sample of organizations, two simple ratios crudely measure the degree of inequality of rewards: the ratio of maximum-minimum earnings in an organization, such as the salary of the president or general manager compared to the average wage of workers in the lowest-skill category and the earning ratios of adjacent organizational statuses such as foreman/worker and supervisor/foreman (see Chapter 1).

The third dimension of inequality, the hierarchy of authority, is more complex and multifaceted than the first two. It consists of a body of institutionalized rights and privileges of a legislative, executive, and adjudicative nature associated with various statuses of an organization. Six indicators of the hierarchy of authority are considered: (1) span of control; (2) Melman's ratio of administrative to production personnel, which takes the entire organization as a unit of analysis instead of a subunit, as in the case of the span of control; (3) number of echelons in the administrative structure; (4) Jaques's time-span of discretion; (5) degree of centralization of decision making; and (6) degree of limitation on the rights of management to make adjudicative decisions as reflected in the number of echelons for which procedural due process has been institutionalized.

Thus, the concept of organizational hierarchy, as I used it in Chapter 1, is three-dimensional. Each of the three dimensions of hierarchy is by definition a linear function of hierarchy. In recent decades, the field of information technology has emerged, and a multitude of applications of this technology has been made in various types of organizations—manufacturing, service, and so on. An extensive body of information concerning the operations of an organization, as regards its technical as well as its administrative functions, is now potentially available with the help of computer technology (see Chapter 8). Access to the body of organizational information can, on the one hand, be severely restricted to one or more levels of management or, on the other hand, be made available to all employees of an organization, managerial as well as rank and file. In the former case, it could be used to centralize the decision-making processes, whereas in the latter case, it could serve as a decentralizing mechanism. The number of authority echelons in an organization or the proportion of employees in all occupational categories of an organization that have access to the principal administrative and technical bodies of information would provide a measure of the degree of hierarchy in the distribution of organizational information. This measure I now conceive as the fourth dimension of organizational hierarchy.

AN ALTERNATIVE HYPOTHESIS

With the aid of the four-dimensional concept of hierarchy, it is now possible to formulate an alternative hypothesis as to the consequences of organizational hierarchy. Instead of the prevailing and largely untested hypothesis that hierarchical structure is positively related to organizational effectiveness, I would entertain

the counter hypothesis, namely, that hierarchical structure is negatively related to organizational effectiveness. The rationale for this hypothesis is as follows: In all likelihood, there is a tendency for the pattern of hierarchical differentiation in an organization to be consistent across the four dimensions, that is, hierarchical consistency in organizational profiles tends to occur just as individuals tend to exhibit status consistency with respect to the social stratification system of a society. This is not to deny, of course, that some organizations will have hierarchically inconsistent profiles, just as some individuals have status-inconsistent profiles. In the event of hierarchical consistency in the organizational profile, it is reasonable to hypothesize that employees who are uniformly low on the continua of skills, rewards, authority, and information distribution will experience work alienation, in particular, a sense of powerlessness and self-estrangement from their work role (Seeman, 1959; Blauner, 1964). As the degree of work alienation increases, commitment to the organization and the collective goals decreases, as reflected in the rates of absenteeism, turnover, accidents, work errors, and the like. Cumulatively, work alienation and the concomitant decline in organizational commitment can in turn be expected to have dysfunctional consequences for organizational effectiveness.

The alternative hypothesis being advanced is not ad hoc in nature; rather, it is linked to a set of hypotheses interrelating hierarchy, work alienation, organizational commitment, and organizational effectiveness. In particular, the set of hypotheses, given the usual *ceteris paribus* condition, is as follows:



OH -
OC +
OE +
WA -

1. Organizational hierarchy is positively related to work alienation.
2. Work alienation is negatively related to organizational commitment.
3. Organizational hierarchy is negatively related to organizational commitment.
4. Organizational commitment is positively related to organizational effectiveness.
5. Work alienation is negatively related to organizational effectiveness.
6. Organizational hierarchy is negatively related to organizational effectiveness.

The hypothesized relationships are diagrammed in Figure 2.1. Clearly, this set of interrelated hypotheses can be conceived as a causal model that could be tested with the help of path analysis, given a suitable data set on a sample of organizations.

Is there any evidence from empirical research for the plausibility of these hypotheses? Relevant empirical findings, such as they are, are sparse and inconsistent. Several studies will be cited to illustrate the level of support for some of the hypothesized relationships.

Morse and Reimer (1956), in a field experiment with clerical workers in an industrial organization in which they manipulated the degree of centralization of decision making, found that productivity increased to a greater extent in the hierarchically controlled program as compared with the autonomy

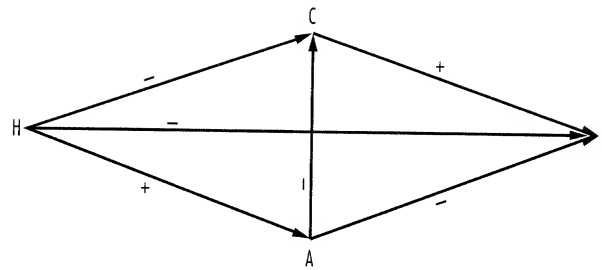


Figure 2.1 Hypothesized relationships among hierarchy (H), work alienation (A), organizational commitment (C), and organizational effectiveness (E).

program. Commenting on the unpredicted result, Trist (1970) observes that “the character of the task produced a constant work flow so that only by having less workers could productivity be increased—a result easier to achieve in a more hierarchically controlled group.” On the other hand, Van Gils (1969), in a field experiment with several clerical centers of the Netherlands Post Office Cheques and Payment Service in which he modified the design of the job as well as the social organization of work, found that productivity increased appreciably. Experimental changes increased the level of skill and authority of employees and, in effect, simultaneously decreased work alienation by “increasing the variety of the work” and by “promoting knowledge of interconnected aspects of the work.” Leavitt (1951) and Guetzkow (Guetzkow and Simon, 1955; Guetzkow and Bowes, 1957) who have conducted laboratory experiments on communication networks have found that highly centralized networks have a higher level of productivity than those with a low degree of centralization. Whether this finding is independent of the degree of complexity of the task—and hence of skill differentiation—was not ascertained. Smith and Tannenbaum (1963), on the other hand, in their comparative study of perceived influence on decision making in several different types of organizations, using the control graph technique, observed in some of their voluntary associations that the lower the degree of hierarchical differentiation with respect to influence on decision making, the higher the organizational effectiveness. Similarly, Melman (1970), in a comparative study in Israel of six privately owned, hierarchical firms with six kibbutz, nonhierarchical firms, found that the latter were significantly higher in effectiveness.

Of the various studies of work alienation that have been conducted in the United States, two have yielded a relationship between hierarchy of authority and work alienation. In a study of professionals in 16 social welfare organizations, Aiken and Hage (1966) found that work alienation was higher in those organizations in which there was a high degree of centralization in decision making. Likewise, in a study of scientists and engineers in a large aerospace company, Miller (1967) observed that employees working for “directive” supervisors had a higher degree of work alienation than those working for “participatory” or laissez-faire supervisors.

It is indeed noteworthy that in none of the empirical studies using the concept of organizational hierarchy were all four dimensions of hierarchy employed. Moreover, in virtually all the studies only the hierarchy of authority is the focus of attention. Curiously enough, this is also the case with the various theories and programs of industrial democracy.

ORGANIZATIONAL HIERARCHY AND INDUSTRIAL DEMOCRACY

Whatever the terminology, whether worker participation, joint consultation, works' councils, workers' councils, workers' control, or workers' self-management, there appears to be a primary concern with modifying the hierarchy of authority. And the principal mechanism employed—whether in Britain, the Netherlands, West Germany, Norway, Yugoslavia, or elsewhere—has been an indirect or representational system of participation involving the election of workers to one or more policy-making bodies of the entire enterprise or a subunit thereof (Lammers, 1967).

In the expanding literature on industrial democracy, there appears to be an increasing realization that prevailing concepts as to the mechanisms for achieving disalienation are not effective. The abolition of private property by means of nationalization of industry or by state ownership in socialist countries has not in itself eliminated the various forms of work alienation such as powerlessness, self-estrangement, normlessness, meaninglessness, and isolation (Fischer, 1967). Nor has a variety of schemes for representational participation on the part of workers contributed to disalienation.

In the Netherlands, Mulder (1971) observes that managers on works' councils dominate the proceedings not only in the frequency of their participation but also in the frequency with which their proposals are accepted. Emery and Thorsrud (1969: 24–25) find that the representation of workers on boards of directors of companies in Norway did not contribute noticeably to the goals of democratization. On the question of the effectiveness of the representation system, they note, tellingly, that:

- (a) There is little evidence of active communication and feedback between the workers and their representative. This, in itself, makes suspect the effectiveness of representation, particularly since the representatives are not responsible, over long periods, to party or program.
- (b) Nine out of the twelve representatives interviewed make some reference to having to take a board or company view of some matters, particularly production.

Kolaja (1960: 134), in a case study of a workers' council in a textile factory in Poland in 1957, concluded that "it did not function well":

The workers did not identify themselves with the plant and its major function as did the management people. . . . The fact that the factory was state property, i.e., the property of all, did not abolish the differentiation between the managerial group, on the one hand, and the labor group, on the other. Workers still felt that "they"

were trying to take advantage of them, depriving them of part of their deserved earnings. Therefore, it is legitimate to conclude that if the means of production become collective property, this does not necessarily result in an individual person's identification with the plant. The ownership by "all" is too diffuse to constitute a stimulus to develop individual ownership identification with the common property.

In Yugoslavia, the findings of several studies point in a similar direction. Unskilled workers tend to be underrepresented on workers' councils; the frequency of participation of managers on the workers' councils is significantly higher than that of workers, particularly as regards the number of suggestions that are accepted (Kolaja, 1966: 16–17, 20–21; French and Rodgers, 1970). Under the circumstances, the findings by Županov and Tannenbaum (1968) in their control-graph study in Yugoslavia that the workers should have more control than they do, and managers less control, seem quite understandable. And in another control-graph study in four Yugoslav industrial organizations, Kavčič, Rus, and Tannenbaum (1971) concluded that

the possible social-psychological effects of indirect or representational participation are limited. Many of the daily events for workers, including the frustrating aspects of technology and bureaucratic administration, are not very much changed by the fact that some members of the organization participate in monthly council meetings. Workers may be too far removed from the actual deliberations of the council to develop the sense of involvement that participation in such deliberations might engender. The workers' daily routine and relationships with supervisors and co-workers may continue unchanged, even though the council makes decisions that affect organizational policy.

But by far the most surprising finding to emerge from a study of workers' councils in Yugoslavia is that by Obradović (1970: 165), who notes

participants in self-management are *more* alienated than nonparticipants. Possibly for these workers the direct experience with self-management has been so frustrating that their sense of alienation has become even greater.

SHOP-FLOOR DEMOCRACY

Several rather important inferences can be drawn from recent research on industrial democracy. First, representational participation fails to represent the needs and aspirations of the worker constituents; moreover, in light of Michels' (1949) thesis of the "iron law of oligarchy," we would expect a process of progressive estrangement to occur between workers and their representatives on workers' councils, possibly due to a tendency for worker representatives to internalize the perspectives of the managers of the council (Van Gorkum, 1969: 19; Emery and Thorsrud, 1969: 25). Second, since managers participating in workers' councils have on the whole more technical knowledge pertaining to managerial decisions

than workers have, there is a tendency for the power of managers to increase rather than decrease as a result of the functioning of workers' councils (Mulder and Wilke, 1970: 446; Mulder, 1971: 34). All of which leads one researcher in the Netherlands to conclude that the works' council is an "hierarchical form of participation in management. Real democracy within the firm requires different ways" (Drenth, 1969: 39). Third, several researchers have also concluded that if there are to be any important advances in democratizing the workplace, it will not be by means of indirect forms of participation through a representational system at a strategic policy level of the firm but rather through a direct form of participation at the operating level, that is, at the work site or on the shop floor (Van Gils, 1969: 96-97; Emery and Thorsrud, 1969: 86; Mulder, 1971).

Insofar as industrial democracy means more than extended negotiations and consultations, there is a need for the transfer of some real managerial power to the employees. It is difficult indeed to see how this sharing can be started at the top, at board level. If democratic participation is to become a reality, it seems inevitable that it must be started at a level where a large proportion of employees are *both able and willing to participate*. (Emery and Thorsrud, 1969: 86)

One of the most intriguing examples of shop-floor democracy is Melman's description of the gang system in the Standard Motor Company in Britain. Groups of workers, some very small and some as large as 3,000, autonomously organized their tasks and supervised themselves, sharing in the group bonus as a result of their increased productivity (1958: 12, 14, 34-36). A vivid account of the gang system was published by Rayton (1972: 8-9), himself a worker in an aircraft factory in Coventry.

We worked out between us how many men we would want and the boss agreed. We elected a ganger and a deputy ganger to take charge on night shifts. We sorted out men, openly, to do the work they were best fitted for. We made mistakes, but they were immediately corrected. We reckoned up the various prices of jobs and proved theoretically that we could increase our earnings. We had all the benches and other contraptions moved to suit our way of working. Some of the firm's officials objected that we were "infringing their rights" and the management proper insisted that *they* would appoint the ganger. We said, "No! He would then be a boss and we are not having a boss. He is *our* man responsible to us, and we, individually and collectively will be responsible for all the work done by the gang!" It wasn't put quite so explicitly as I have just written, but that was what was meant, and the managers being good chaps (we knew them personally) accepted it. This, insisting on ourselves appointing the ganger, turned out to be the key to success. The "contract" (written, as is the Common Law kind of contract) was not between the firm and the ganger, but between the firm and the gang as an entity. In our case "Gang No. 3." Gangers could come and go, but Gang 3 went on. We knew of course that in a serious situation the management could abolish Gang 3—but why should they? They wanted us. Wanted the work. We had endless discussions the first few weeks. We kept watch on the ganger to see that "our money" was being properly "banked" with the wages office. The ganger kept watch on us to

see that each of us was earning his keep and a bit over. We watched each other. And then, eventually, finding that everything was working out well we gave up worrying and concentrated on work.

The position was that the ganger kept track of work and money and left discipline and other details to us. He was just one member of a democratic team. He saw to it that the gang was supplied with tools, materials, and information derived from design office memos and blueprints. Clever men helped others decipher difficult drawings, not so clever men were content to do the drudge work. No distinction was made on degrees of skill—that was a waste of time. Divisive. All this was tacitly understood. Management also tacitly understood, and no written rules were made. Consequently there were no “orthodoxies,” everything being left as fluid as possible. In this way all kinds of initiatives came from the shop floor, and these, added to brilliant design, planning and organization pushed the firm into the lead in aircraft production. Every week men joined us and were accepted at once as equals. Only the ganger and his deputy worried about money; the rest were free to concentrate on their work which was a great relief to men previously tormented by individual piecework. But it still was piecework, still gave men the urge to earn more, and earn it by brains and skill rather than by being driven. Decisions were made at gang meetings (in meal breaks) and the ganger was obliged, as in Parliament, to answer questions. He could also, in return, publicly castigate men who were at fault. Naturally he was the best man on the gang for all this, which was why the men picked him. Men working together almost always “sense” the man they want as leader. And they could also sack him, at a gang meeting.

By developing the gang system, the workers in the Coventry aircraft factory succeeded in modifying their hierarchical profile with respect to all four dimensions. By having “all the benches and other contraptions moved to suit our way of working,” the workers redesigned their job and, in the process, reduced skill and knowledge differentials. By means of a group piecework administered by the ganger, the workers increased their earnings and simultaneously reduced reward differentials in the factory. Authority differentials were also reduced by virtue of the fact that workers elected their own foreman, called the “ganger,” who “kept track of work and money and left discipline and other details to us. . . . Decisions were made at gang meetings (in meal breaks) and the ganger was obliged, as in Parliament, to answer questions.” The workers also had the right to fire their ganger at a gang meeting. Finally, the gang system also had the effect of reducing differentials in organizational information. The ganger “saw to it that the gang was supplied with tools, materials, and information derived from design office memos and blueprints.” And the workers, in turn, ascertained at gang meetings whether the money “was being properly ‘banked’ with the wages office.”

The phenomena of shop-floor democracy have stimulated interest not only in England but also in the Netherlands, Norway, Sweden, and elsewhere (Van Gils, 1969; Emery and Thorsrud, 1969). Field experiments and action research programs, guided by the sociotechnical system framework and kindred open

systems models, are under way in various countries.³ It is reasonable to expect that some of these studies will yield increasing evidence pertaining to our hypothesized relationships, such as a negative relationship between hierarchy and organizational effectiveness and a positive relationship between hierarchy and work alienation (Trist, 1973: 110). Such research promises to redirect theory and research on industrial democracy. Whether it will contribute to our understanding of the problems of transforming hierarchical organizations in the direction of nonhierarchical and voluntary modes of organization remains to be seen (Evan, 1963a).

Direct participation at the shop-floor level, as a strategy for counteracting worker alienation and increasing organizational effectiveness, poses the problem of generalizing the pattern to all categories of employees at all levels of an organization. One approach to this unsolved problem is to conceptualize direct participation as involving a process of *destratification* with respect to all four dimensions of hierarchy.

THE DESTRATIFICATION-RATIONALIZATION HYPOTHESIS

By "organizational destratification," I mean redesigning jobs to decrease knowledge and skill differentials, redesigning systems of compensation to decrease reward differentials, redesigning decision making to decrease authority differentials, and redesigning the distribution of organizational information to decrease information differentials among different categories of employees. However, if an effort in the direction of destratification in the service of disalienation is to succeed, it must reckon with the imperious, environmental demands for organizational effectiveness imposed on any firm, whether in a market economy, a planned economy, or a social-ownership society. Another impetus for organizational effectiveness is that it is a prerequisite for increasing the rewards of all constituents of the enterprise. To ensure increasing effectiveness, the secular trend for the rationalization of industrial enterprises must be taken into account. The process of rationalization—that is, the increasing application of techniques based on science and technology—may, however, be incompatible with the process of destratification, thus posing a dilemma as to how to increase the level of both processes in an organization—destratification as well as rationalization—in order to realize the twin values of simultaneously decreasing work alienation and increasing organizational effectiveness.

An analysis of some facets of rationalization may suggest a possible solution to the dilemma of increasing both rationalization and destratification, thus avoiding a trade-off situation. Two dimensions of rationalization may be considered:

³ Cf. Emery and Trist (1960); Davis and Trist (1972); McWhinney and Eldon (1972); Trist (1973); Emery and Thorsrud (1976). McWhinney and Eldon, "A Reticular Society: New Institutions for a Post-Industrial Democracy," a paper presented at The Center for the Study of Democratic Institutions, Santa Barbara, CA, 1972 (mimeo).

(1) technological progress; and (2) an increase in the use of control mechanisms to ensure predictable and efficient task performance. In developing or employing new technology, jobs can, in principle, be designed so as to upgrade rather than downgrade the occupational skills and knowledge required to perform the various tasks in an organization. By choosing to upgrade skill levels, occupational differentials can be reduced, thereby justifying a reduction in reward, authority, and organizational information differentials. As for control mechanisms to ensure predictable and efficient task performance, there is always a choice between personal versus impersonal control mechanisms. The use of impersonal control mechanisms by means of the formalization of rules and the standardization of procedures reduces the potential for arbitrary and capricious exercise of authority by superiors, particularly if there are adequate due-process safeguards for all employees in an organization (Evan, 1962a; Rushing, 1966a, b).

In short, these considerations suggest the following destratification-rationalization hypothesis: As the positive slope of the relationship between these two clusters of variables increases, organizational effectiveness increases and work alienation decreases. Admittedly, organization theory and organization practice, whether or not guided by research on industrial democracy, do not yet throw much light on how to achieve the underlying values of organizational destratification and organizational rationalization.

NEED FOR AN EXPERIMENTAL PERSPECTIVE

At this juncture, several predictions of a theoretical and research nature may be in order. Organizations undergoing the joint transformation processes of destratification and rationalization would not necessarily enjoy consensus as regards goal formation and decision making. Instead of the common conception of a unity of interests in the firm held by many organizational researchers in capitalist as well as socialist countries, a diversity of interests is a theoretically more defensible premise. Occupational differentiation within the firm unavoidably gives rise to different perceptions of organizational reality and in turn results in heterogeneous interests emerging and affecting or seeking to affect the decision-making processes. If the firm is to become progressively destratified and rationalized, the diversity of interests requires articulation. To overcome "pluralistic ignorance" and the fear of opposition to organizational policies, the formation of organized coalitions accompanied by the institutionalization of dissent is necessary (Lipset *et al.*, 1956: 413-418; Katz and Kahn, 1966: 53-54). The firm as a social system thus becomes polycentric and polyarchival in nature (Tannenbaum, 1968: 32, 53-54). To resolve the inevitable conflicts among the various coalitions internal and external to the firm requires a process of bargaining, assuming that an autocratic mode of decision making is incompatible with the model of an industrial enterprise seeking to become more egalitarian as well as more effective (Cyert and March, 1963).

Significant progress in research on industrial democracy will probably require a systematic effort to conduct organizational experiments, whether in the laboratory or in the field, on the consequences of varying degrees of organizational hierarchy for alienation, commitment, and organizational effectiveness (Evan, 1971a). To undertake field experiments that test the relative efficacy of alternative strategies for democratizing the workplace presupposes an appreciation of what Campbell (1969: 427) calls an “ideology of experimentation”:

We must be able to advocate without that excess of commitment that blinds us to reality testing. . . . Administrators must advocate the importance of the problem rather than the importance of the answer. They must advocate experimental sequences of reforms, rather than one certain cure-all, advocating Reform A with Alternative B available to try next should an honest evaluation of A prove it worthless or harmful.

Although Campbell’s prescription to administrators seems highly persuasive, the fact that relatively few administrators in any present or past society—except for those associated with the Norwegian Industrial Democracy Project and cognate studies in other countries—have behaved in accordance with the “ideology of experimentation” suggests that there are vested interests impeding the implementation of this principle (Emery and Thorsrud, 1976). This predicament has led Campbell (1973) to speculate on the methodological problems and characteristics of an “experimenting society”:

The experimenting society will be one which will vigorously try out proposed solutions to recurrent problems, which will make hard-headed and multi-dimensional evaluations of the outcomes, and which will move on to try other alternatives when evaluation shows one reform to have been ineffective or harmful. We do not have such a society today. While all societies are engaged in trying out innovative reforms, none is yet organized to adequately evaluate the outcomes. Programs are instead continued or discontinued on inadequate or other grounds. This is due in part to the inertia of social organizations, in part to political predicaments which oppose evaluation, and in part to the fact that the methodology of evaluation is still inadequate.

Since organizations are subsystems of a larger society, a prerequisite for fully implementing an experimental strategy with respect to industrial democracy may very well be the transformation of the envioning society in accordance with a model of an “experimenting society.”

CONCLUSION

Although the four-variable model of organizations developed in this chapter and the empirical studies reviewed deal exclusively with industrial organizations—with the exception of one study pertaining to a voluntary association—there is no intrinsic reason why this model is not generalizable to all nonindustrial

organizations as well. Clearly, some types of organization, such as administrative agencies and the military, may on the whole be more hierarchical in structure than most industrial organizations. On the other hand, some types of organizations, particularly those consisting predominantly of professional and technical occupations, such as research laboratories, colleges and universities, hospitals, professional associations, and scientific societies, may on the whole be less hierarchical than most industrial organizations. Whether the hypothesized relationships among the four variables in the model would differ depending on the type of organizational context only comparative empirical research could ascertain. A *comparative* test, however, of the six propositions generated by the model would have to take into account a cultural parameter as well as a methodological fact of life in organizational research.

By a “cultural parameter,” I refer to the distinctive norms and values embedded in the societal environment(s) that impinge on any organization. Thus, for any organization or class of organizations the salient norms and values may be rooted in one or more institutional spheres in society, whether the economy, the political system, the family, law, religion, or education. Thus far, virtually no cross-national or cross-cultural study of organizations has succeeded in conceptualizing and operationalizing the cultural parameters affecting the validity of any proposition in organization theory (Evan, 1975a: 1–16). Any test of the model advanced in this chapter would have to face up to this problem.

Equally problematic is what I referred to as the methodological fact of life in organizational research. In the case of many organizational variables, such as hierarchy, alienation, and commitment, there are many thorny problems of measurement. Although notable progress has been made owing largely to the Aston studies, the problem of standardization of organizational measures persists (Triandis, 1966; Pugh *et al.*, 1968, 1969). Price (1972b) has made an important contribution to the field by compiling some measures of organizational variables.

When the variable of organizational effectiveness—the dependent variable in our model—is considered, the problem is even more acute. In the first place, there is a dearth of empirical studies in which organizational effectiveness is explicitly and systematically measured. Price’s (1968) inventory of propositions on organizational effectiveness rests largely on an exegesis of 50 studies but does not succeed in operationalizing a general measure of organizational effectiveness applicable to all types of organizations. Secondly, virtually no empirical studies have undertaken to measure organizational effectiveness in different types of organizations, that is, in a cross-organizational comparison. Thus, any effort to test the model in this chapter, whether within a framework of one class of organizations, cross-organizationally, or cross-culturally, would have to come to grips with the basic problem of measuring organizational effectiveness. (See Chapter 22 in this book.)

PART II

ORGANIZATIONAL CONFLICTS

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Role Strain and Reciprocity

Organizations designed according to principles of hierarchy, as we have seen in Chapters 1 and 2, coordinate the behavior of their members by means of specified goals, rules, and roles. The incumbents of the various managerial roles have the authority to exercise control over their subordinates in the interest of complying with organizational policies and accomplishing officially formulated objectives. As a result, inequalities of power are created, accompanied by other inequalities in such areas as rewards, prestige, and information. Not surprisingly and unintentionally, such inequalities encourage the emergence of conflicts regarding goals, rules, tasks, and the like among the members occupying the various hierarchically ordered roles. Another consequence of the hierarchical system of controls—not unrelated to the emergence of conflicts—is the widespread occurrence of “role strain,” which has been defined as the “felt difficulty in fulfilling role obligations” (Goode, 1960).

In Chapter 3, I explore the role strains of chemists in three departments (basic research, applied research, and development) of an industrial research laboratory, in relation to the allegedly universal “norm of reciprocity” (Gouldner, 1969).

In any formal organization, the goals as reflected in the system of functional differentiation result in a distinctive pattern of role differentiation. In turn, role differentiation, whether viewed hierarchically or horizontally, leads to what Mannheim (1936) has called "perspectivistic thinking," namely, a set of perceptions, attitudes, and values induced by incumbency in a particular status. In an organization, as in a society as a whole, status occupants tend to develop a commitment to subunit goals and tasks, a commitment that may be dysfunctional from the viewpoint of total organizational goals. In other words, "perspectivistic thinking" may interfere with the coordination of effort toward the accomplishment of total organizational goals, thus generating organizational pressures to ensure adequate levels of performance.

The purpose of this chapter is to inquire into the differential distribution of such pressures in a research organization and its relation to role strains. It should be emphasized that the focus of this chapter is on the ideas that emerged in the course of research rather than on the specific findings. The data to be presented are admittedly fragmentary. Their chief value, as we shall see, is not as evidence for the testing of hypotheses, but as a point of departure for what may prove to be a fruitful way of exploring the relationship between role strain and the norm of reciprocity in research organizations.

ORGANIZATIONAL PRESSURES

The research on which this chapter is based was conducted in a relatively small industrial chemical research organization that is part of a large chemical company. Three structural components of this research organization will be the focus of our attention: a basic research department, an applied research department, and a development department.¹

These three units may be conceived as constituting points on a continuum of distance from the primary organizational goal, with the development unit being closest to the organizational goal and the basic research unit being farthest from it. The primary goal of the research organization is presumably to assist the manufacturing divisions of the parent corporation in producing chemical products at a profit. Accordingly, we expected that organizational pressures—which may be defined as efforts on the part of management to ensure a level of performance consonant with organizational requirements—would be higher

¹ The terms used here refer to the following definitions:

Basic Research—Includes original investigations for the advancement of scientific knowledge that do not have specific commercial objectives, although such investigations may be in fields of present or potential interest to the reporting company.

Applied Research—Includes investigations directed to the discovery of new scientific knowledge that have specific commercial objectives with respect to products or processes.

Development—Includes technical activities of a nonroutine nature concerned with translating research findings or other scientific knowledge into products or processes. Development does not include routine technical services to customers or other items excluded from the above definition of research and development. (National Science Foundation, 1960: viii)

the more proximate the unit's position is to the organizational goal, that is, highest on the development unit, next highest on the applied research unit, and lowest on the basic research unit.

Organizational pressures may take various forms (such as determining the duration of projects, setting deadlines for projects, or allocating research funds). The first of two crude indicators of organizational pressures available to us is the proportion of projects in a department initiated and sponsored by the manufacturing divisions as compared with the research organization itself. Sponsorship of projects by manufacturing divisions may engender greater pressures to produce a "useful" result in a given time than does sponsorship by the research organization itself. As shown in Table 3.1, the development unit, in contrast to the basic research unit, is engaged almost exclusively in work initiated and sponsored by the manufacturing divisions of the parent corporation, whereas the basic unit devotes one-half of its project time to studies initiated and sponsored by the research organization itself; the applied research department—at least in this particular organization—has virtually the same proportion of its projects as the basic research unit sponsored by the research organization.

The second indicator of organizational pressure is the mean number of projects per chemist per unit of time. Admittedly, projects differ in degree of complexity and amount of time required for completion. Bearing this qualification in mind, the development department again appears to be subject to a greater degree of organizational pressure than either of the other departments: the mean number of projects per chemist in 1958 was 1.7 for the development department, 1.5 for the applied research department, and 1.3 for the basic research department. In short, my expectation that organizational pressures would be differentially distributed in the three functionally distinct departments appears to be borne out.

Table 3.1 *Projects Sponsored by Manufacturing Divisions and the Research Organization, by Department*

<i>Department and Source of Sponsorship</i>	<i>N</i>	<i>Percentage</i>
Basic research		
Research organization	12	50
Manufacturing divisions	12	50
Applied research		
Research organization	23	48
Manufacturing divisions	25	52
Development		
Research organization	9	15
Manufacturing divisions	51	85

Source: Administrative records of the research organization.

ROLE STRAINS

Role strain, according to Goode (1960), is the "felt difficulty in fulfilling role obligations." As in the case of organizational pressures, role strains may also take various forms. For example, some types of role-set (Merton, 1957b) relations may entail conflicting obligations; and inconsistent rank orderings on various dimensions of a role, such as autonomy, prestige, and rewards—that is, "status incongruity"—may engender tension.

I shall focus only on those role strains that have their source in organizational pressures, my hypothesis being that there is a positive and linear relationship between organizational pressures and role strains. The first of two measures of role strain consists of conventional morale indicators, such as absenteeism, turnover, and accident rate. The distribution of role strain, as measured by these indicators, for the three departments is shown in Table 3.2. The applied research unit is consistently higher in its rates of accidents, absenteeism, lateness, and labor turnover than the other two units, with the basic research and development units being approximately equal on the morale measure of role strain. Thus, my prediction of a linear relationship between organizational pressure and role strain as measured by these indicators was not confirmed; the actual relationship appears to be roughly curvilinear—using the terms "linear" and "curvilinear" very loosely, since my data are not metrical and we have a "sample" of one of the three types of departments.

When we turn to the second measure of role strain—the degree of discrepancy between a scientist's actual research project and his ideal research project—the data become even more fragmentary: we are dealing here with only 15 chemists divided into three subgroups, one for each department. Each chemist was asked to give a technical description of the major research project on which he was currently working and a technical description

Table 3.2 *Morale Indicators, by Department*

<i>Morale Indicator</i>	<i>Mean Number</i>		
	<i>Basic Research (N = 18)</i>	<i>Applied Research (N = 31)</i>	<i>Development (N = 35)</i>
Accidents	0.06	0.23	0.14
Absences (days)	4.33	6.53	6.17
Punctuality			
Late arrivals	14.44	19.68	15.03
Early departures	2.05	9.06	1.77
Turnover (dismissals and resignations)	0.06	0.45	0.26

Source: Administrative records of the research organization.

of his ideal research project, assuming no organizational limitations on time and money.

The pairs of statements of actual and ideal research projects were compared and rated independently by three judges, all of whom hold doctorates in chemistry and have several years of research experience. The ratings were in terms of what is considered basic research in chemistry and were scored in one of three ways: (1) whether the actual project and the ideal project are the same or equal in such terms; (2) whether the actual project is closer than the ideal project to basic research; or (3) whether the ideal project is closer than the actual project to basic research. I assumed that either of the two forms of divergence between actual and ideal research would indicate role strain.

The statements of nine chemists were rated as congruent; those of the remaining six were rated as incongruent, from which we infer that the latter are subject to the task-dimension of role strain. The cases of role strain distributed themselves with the mode at the department of applied research: one case (out of three) in basic research, four cases (out of seven) in applied research, and one case (out of four) in development. Given the small sample sizes, we may merely suggest that a higher proportion of chemists in the applied research department have role strain than do those in either basic research or development.

A possible interpretation of the role strain of the chemist in the applied research department is that he may subjectively experience a greater amount of relative deprivation compared to members of the basic research and development departments. On the one hand, since his training is roughly comparable to that of the chemists in the basic research department, he may wish to pursue problems more deeply than he does. On the other hand, although he is expected to obtain results of potential value to the company, his work is not as close to the goal of the organization as is that of the chemist in the development department; nor does he generally learn of the use to which his results are put by the manufacturing divisions. Hence, he may feel deprived both of the opportunity of engaging in basic research as well as of the gratification of contributing directly and visibly to the accomplishment of the mission of the organization.

We may also liken the position of the applied researcher in the industrial research organization to that of a foreman in a production organization: both occupy an intermediate position that has conflicting or ambiguous expectations and orientations. The foreman, as the lowest person on the managerial ladder, hardly feels part of the management nor of the group of workers. Analogously, the applied researcher feels that he is not part of either the basic research or the development group (Gardner and Whyte, 1945; Roethlisberger, 1945; Wray, 1949).

The frequent inadequacies of existing theory and the difficulties of applying it to the solution of novel and practical problems suggest that the task of the applied researcher is fraught with more ambiguity than the tasks of those engaged in either basic research or development. If inquiry establishes that applied researchers in general, and not only in this particular research organization, perceive greater ambiguity in their task than those in either basic research or development, this would throw some light on the finding of greater role strain among this group of chemists.

THE NORM OF RECIPROCITY

The two possible interpretations set forth above of the finding that applied chemists exhibit more role strain than either basic research or development chemists may be formulated in terms of the "norm of reciprocity," cogently analyzed by Gouldner (1960). For the applied researcher, the norm of reciprocity as it pertains to his relationship with his employer may be more salient than for either the basic research or the development chemist.

All institutionalized role relationships, whether employer-employee, husband-wife, parent-child, teacher-student, and so on, are grounded in a set of mutual expectations. As part of conforming with one another's normative expectations, the role partners share in common a moral norm of reciprocity. This norm obliges Ego to give benefits to Alter from whom he has received benefits.

Hobbes (1958: 125) includes reciprocity as one of his "laws of nature" (125). And according to Westermarck (1908: 154), reciprocity is a universal norm. "To requite a benefit, or to be grateful to him who bestows it, is probably everywhere, at least under certain circumstances, regarded as a duty" (Gouldner, 1960: 171). There is obviously no need to view reciprocity as an instinct. Rather, it may be viewed as a tendency generated by the common social and cultural attributes of all human role relationships. To the extent that this norm is internalized by members of a society in all their role relationships, it is obviously an important mechanism of social stability. This, however, does not preclude the possibility that the norm of reciprocity may under some conditions have dysfunctions in some role relationships, which possibility Gouldner (1960: 177) recognized but did not examine in his analysis.

In the case of the scientist engaged in basic research in industrial organizations, the goals of the role partners may be *perceived* as divergent even if in actuality they are not. The scientist, focused on contributing to scientific knowledge per se, becomes cognizant of the fact that this does not contribute—at least not always in the immediate or foreseeable future—to the principal goal of the company, which is profit. Accordingly, he may feel that he is not "earning his keep." To counterbalance this disquieting feeling, the basic researcher may seek refuge in his status as a member of a scientific community with its norms of contributing to the body of scientific knowledge. In addition, to reduce his dissonance, accentuated by his awareness that he is in effect not conforming to the moral norm of reciprocity, he is impelled to "adjust" his research to increase the chances of a "useful end result" emerging, thereby reciprocating the benefits bestowed on him by his employer.

This process of adjusting one's research interests to ensure compliance with the norm of reciprocity may prove more difficult for the applied research chemist than for the basic research chemist. The former may not be more socialized into the value of providing his employer with a service than the latter, yet his work is supposed to show more promise of a "payoff." In view of the nature of his training, he may have a degree of identification with the scientific community comparable to that of the basic researcher; hence, the norm of reciprocity

confronts him with a conflict of loyalties to competing reference groups: the scientific community versus the employer or employing organization. The chemist engaged in development work probably experiences no such difficulties in his role performance. His task is explicitly structured to promote the employer's interests, and hence he is not likely to perceive the norm of reciprocity as imposing any burden on him. The different responses to the norm of reciprocity appear to be a function of the type of role a scientist performs vis-à-vis his employer.

ALTERNATIVE ROLE MODELS

Sociologists studying research organizations tend to conceptualize the position of the scientist as a "professional" whose goals and values are in conflict with those of his status as a "bureaucratic employee" (Solomon, 1957; Marcson, 1960). This, however, implies that the scientist has a professional-client relationship with his employer, which is not true of the scientist interested in basic research, although it may be true of the engineer and of the scientist engaged in applied research and development. For, by definition, a professional is one who provides a service based on established knowledge to someone—namely, a client—who requests his specialized service. However, the scientist interested solely in creating new knowledge, who is employed by an industrial research organization, is in fact not performing the role of a "professional" vis-à-vis the impersonal client, the organization. Only if he abdicates his scientific role of discovering new knowledge and seeks to *apply* existing scientific knowledge to the solution of the organization's problems is he acting as a professional with reference to his employer, the client. In all probability, a substantial proportion of scientists employed in industry are engaged in activities that might be characterized as applied research and hence are actually providing a professional service to their client. An even higher proportion of scientists are probably engaged in development work and perform a role akin to that of an "employee" vis-à-vis an "employer" in that they are "assigned" projects with detailed specifications as to the end product desired, and have no autonomy with respect to the research process. And only a relatively small proportion of scientists are conducting basic research in industry.²

Neither the employer-employee relationship nor the professional-client relationship appears to be a functional role model for the basic research scientist employed in industry. Since the number of such scientists in industry is increasing as the size of basic research budgets grows from year to year, a clarification of this role relationship is of practical as well as theoretical significance.

² These imprecise statements are due to the absence of data on the distribution by function of the 149,000 scientists employed in industry. They are inferred from some data on the allocation of funds in industry to basic research (3 percent), applied research (21 percent), and development (75 percent); and from some very gross information on the functions performed by scientists grouped together with engineers. For the source with respect to allocation of funds, see National Science Foundation (1960: ix); for the source regarding functions performed by scientists and engineers see National Science Foundation (1960: 11).

An alternative role model for the basic researcher in industry is that of the "patron-artist" relationship. This model, as we will see, seems more functional than that of either the employer-employee relationship or the professional-client relationship.

The ideal-typical patron-artist relationship is one in which the patrons afford the artists the freedom to pursue, in their own manner, their artistic impulses. The conception of "an autonomous, non-utilitarian art enjoyable in itself," or "art for art's sake"—already familiar to the Greeks but forgotten in the West in the Middle Ages—was rediscovered in the Renaissance (Hauser, 1959: 74). To be sure, patrons in the Renaissance and thereafter have tried to influence the work of the artist—against the latter's wishes—in a variety of ways. Since the Renaissance, patrons have tended to deviate in at least two directions from the ideal-typical patron-artist relationship: They have assumed either the status of an employer vis-à-vis the artist or that of a client, so to speak. In both cases these forms of deviation from the ideal type impair the autonomy of the artist. In the status of an employer, patrons feel that they have the right to specify precisely the end product of the work of the artist by virtue of their formal or informal contractual relationship. They believe that they are entitled to dictate not only what the employee should do but how he or she should do it. Indeed, in the pre-Renaissance period, artists had a status comparable to employees; in fact, they were commonly called "artisans" rather than "artists." And their work was closely regulated by the dictates of the Church and the guilds (Hauser, 1959: 51–84; Bazin, 1959: 198).

In the status of a client, patrons throw themselves, as it were, on the mercy of the artists in the hope that the artists, in their capacity of competent professionals, will provide them with the best possible service. They trust that the artists can discover what they, the clients, really wish and need. In this type of relationship, artists also have to relinquish their own independent artistic judgments and impulses on behalf of the aesthetic needs—as they divine them—of the clients.

Clearly, the ideal-typical patron-artist relationship, in contrast to the employer-employee and client-professional relationships, describes the position of the basic researcher in industry. In all likelihood, many industrial research organizations accord scientists the status of professional vis-à-vis a client; some persist in assigning them the status of an employee vis-à-vis an employer; a few are experimenting with a new role relationship that we may interpret as being, in effect, modeled after the kind of patron-artist relationship I have discussed—a role relationship in which the basic research scientists, like the artists, are granted the right by their patron, the industrial organization, to pursue their research in accordance with their own scientific interests and standards.

In some large industrial laboratories, all three analytically distinguishable work relationships may be found. The employer-employee relationship may apply not only to manual and clerical employees but also to engineers and scientists engaged in development work; the professional-client relationship may

apply to legal and medical personnel as well as to applied researchers; and the patron-scientist relationship may apply to those engaged in basic research.

The status sequences of scientists employed in industrial research organizations may entail movement from basic research to applied research and thence to development, or from the role of a scientist to a professional and thence to an employee. The frequency of different status sequences of scientists in industrial research organizations is, of course, an empirical question. Barring movement out of research into administrative work, a one-step sequence from basic research to applied research or from applied research to development is probably more common than a two-step sequence from basic research to applied research and from applied research to development. Some virtuosos may resolve their role strains and conform to the norm of reciprocity by alternating in their performance of the roles of scientist, professional, and employee.

Each of these three ideal-typical work relationships is presumably governed by a distinctive and dominant norm: in the employer-employee relationship, the norm of obedience to a superior is fundamental; in the client-professional relationship, it is the norm of service to a client; and in the patron-patronee relationship, the governing norm is that of autonomy for the patronees to pursue their work as they see fit. The norms underlying each of these role models stand in a different relationship to the norm of reciprocity: the norm of obedience in the employer-employee relationship is compatible with the norm of reciprocity; the norm of service to a client in the client-professional relationship intensifies the bindingness of the norm of reciprocity, as our findings on the applied research chemist suggest; and the norm of autonomy in the patron-patronee relationship is incompatible with the norm of reciprocity. The incompatibility between the norm of autonomy and the norm of reciprocity points to a condition under which the alleged universal norm of reciprocity may prove dysfunctional.

A plausible hypothesis may be advanced that the norm of reciprocity in the industrial employer-scientist relationship functions as a mechanism for diverting research energies from basic research to applied research. If this hypothesis is confirmed, it would point to a built-in pressure for the erosion of basic research in industry. Since the amount of basic research conducted in industry is now relatively small but growing because of technological requirements and developments, the pressure on the basic research scientist stemming from the norm of reciprocity may become increasingly problematic and dysfunctional for science as well as industry (National Science Foundation, 1960).

SCOPE OF THE PROBLEM OF ROLE STRAIN

The problem of the role strains of the scientist and of the potential dysfunctions of the norm of reciprocity is very likely not confined to the industrial research context. In other institutional contexts, academic and government, similar problems may arise. The university scientists who apply for a grant to a public or private foundation may "custom tailor" their project to what they take to be

the practical or applied interests of their prospective grantor or patron. After receiving the grant, they may feel an obligation to express their gratitude to the foundation by focusing on the applied rather than on the theoretical aspects of their research, although the latter may in fact be of more interest to them. In a series of conferences on interdisciplinary team research in social science, it was observed that

often the researcher fears that the person or organization making the grant will be annoyed that he is not working on the problem as set forth in the application for funds. . . . It was agreed that the grantor has a right to know what is going on in the research and to exercise a modicum of control over it. . . . And when an investigator begins a search for funds, he gives up some of his freedom. (Luski, 1958: 283–284)

In a study of research in an academic setting, Bennis (1956) found that a university research group financed on a year-to-year basis by a private foundation was market-oriented, whereas another research group with a four-year contract was task-oriented. As one member of the former research group put it:

The main problem here is doing research and justifying ourselves to the foundation. The thing that's annoyed me the most is that we spend so much time looking at our navel without doing anything—except justifying our existence. (Bennis, 1956: 30)

Similarly, government scientists, supported by taxpayers and answerable yearly to Congress when it makes its appropriations, may feel that they should justify their existence by producing something of practical value. Moreover, the specific missions of the parent agencies of government laboratories, whether in the field of health, defense, agriculture, or whatever, may tend to restrict the selection of research problems.

Judging from an unpublished report by an official of a government-granting agency on the state of a particular field of science in Europe, this problem is by no means unknown there:

The scientist in Europe builds his academic career by dedicating himself early to an established institute or institute director. He works his way through the ranks, always at the service of the director. He cultivates the friendship of other institute directors, thereby hoping to establish himself in the good graces of those who will pass upon his application for promotion and tenure. (personal communication)

This suggests a guildlike, master-journeyman relationship that requires the scientists to express their fealty to the institute director. In this feudal atmosphere, we would also expect to observe instances of wholly extraneous considerations brought to bear on the selection and conduct of research. The scientists are here enmeshed in a social system in which the norm of reciprocity is crucial to their continuing role as scientists.

CONCLUSION

There are some signs of progress toward the institutionalization of the role model of the patron-artist for the employer-scientist and the grantor-scientist relationship. For example, the National Science Foundation is by federal mandate interested in the advancement of basic research. Unlike other federal agencies concerned with the promotion of science, this foundation has no other specific mission. Recognition of the researcher's need for freedom to pursue research without interference is also expressed in the Public Health Service, as evidenced by the following statement of one of its officials that the investigator "must also be free in the use of the funds granted to change his research as desired, to permit follow-up of any new and promising leads. Public Health Service research grant policy does permit this sort of freedom and encourages the investigator to use the research funds for the most important research purposes he determines" (Rankin, 1956: 292). Both of these public foundations award relatively long-term research grants.³ Similarly, some private foundations, such as the Alfred P. Sloan Foundation, have initiated a program of flexible grants to promising scientists without regard to the merits of the projects to be undertaken.

A small, although increasing number of industrial organizations are evidently experimenting with programs of basic research—that is, with acting as a patron to the scientist. To be sure, only the larger and financially more secure corporations can afford such a venture, since the return on such an investment is uncertain and remote in time.

The further institutionalization of the role model of the patron-artist for the employer-scientist and the grantor-scientist relationship would probably reduce organizational pressures on scientists and in turn reduce their role strains. As progress is made toward a social redefinition of the role relationship of scientists to their employer or grantor, the potentially dysfunctional consequences for basic research, due to particular social structures, will diminish. The crystallization of the new patron-artist role model would probably throw in relief the old role model of professional-client, thereby possibly facilitating the socialization of the applied researchers who, in discharging their "professional" obligations to their client, would thus experience less role strain.

³ It is small wonder that the Public Health Service and the National Science Foundation have a highly prestigious standing among scientists. In an unpublished survey on attitudes toward sources of research funds, a nonrandom sample of 89 prominent scientists were asked to rate the desirability of six sources of funds, assuming that all of them are willing to provide the desired support in the same amount and according to their present policies, as these are understood by the respondents. The resulting rank order was as follows: (1) National Science Foundation, (2) National Institutes of Health, (3) Rockefeller Foundation, (4) funds from the scientist's own institution, (5) American Cancer Society, (6) Atomic Energy Commission.

Organization Man and Due Process of Law

In Chapter 4, another type of role strain problem is analyzed, that of junior and middle executives who tend to develop an ideology of the “organization man,” which emphasizes unconditional loyalty to the corporation (Leinberger, 1991). With the recent wave of corporate mergers and hostile takeovers, however, all levels of management run the risk of summary dismissal (Hirsch, 1987a). Small wonder that corporate loyalty can no longer be taken for granted (Hirsch, 1987a). At least two interrelated structural sources of the “organization man” ideology are identified: (1) the unstructured tasks of junior and middle executives are conducive to the use by superiors of subjective criteria of performance appraisal; and (2) an authority system devoid of mechanisms to ensure “procedural due process of law” tends to prevail (Evan 1962a; 1973b).

Increasing usage of the term “organization man” among laymen or of its technical equivalents among social scientists suggests that Whyte (1956) has identified a significant phenomenon in large organizations.¹ Although he asserts that the phenomenon conveyed by this term is observable in industrial, educational, governmental, and other types of organizations, his point of departure is the industrial organization; and the status of “organization man” that appears to concern him primarily is that of the junior or middle executive.

Unlike the ubiquitous entrepreneur of the nineteenth century whose ideology was rooted in the Protestant Ethic, the ideology of the equally ubiquitous corporate manager of the twentieth century, according to Whyte (1956: 4–22), is founded on the Social Ethic. Whereas the entrepreneur was an individualist and an innovator, the organization man is a conformist, socialized into the values of organizational loyalty, teamwork, and the avoidance of independent opinions or original ideas. By Social Ethic Whyte means “that contemporary body of thought which makes morally legitimate the pressures of society against the individual. Its major propositions are three: a belief in the group as the source of creativity; a belief in ‘belongingness’ as the ultimate need of the individual; and a belief in the application of science to achieve the belongingness” (Whyte, 1956: 7). This ethic or ideology of the organization man, as we will refer to it, “rationalizes the organization’s demands for fealty and gives those who offer it wholeheartedly a sense of dedication in doing so—in *extremis*, you might say, it converts what would seem in other times a bill of no rights into a restatement of individualism” (Whyte, 1956: 6).

The contrast Whyte draws between the Protestant Ethic and the Social Ethic is not unlike Riesman’s (Riesman, Denney, and Glazer, 1950) distinction between “inner-directed” and “other-directed” character structure. It is also related to the analyses by Bendix (1956) and Sutton (Sutton *et al.*, 1956) of the entrepreneurial versus the managerial ideology. The historic warrant for the assertion advanced by Whyte and others about the transition from the Protestant to the Social Ethic is a question that transcends the scope of this chapter. Nor will we be concerned with appraising the evidence for the currency of the ideology of the organization man among junior and middle executives. Rather, our purpose is to analyze some social-structural sources and consequences of this ideology.

A CRITICISM OF WHYTE’S THESIS

Whyte, like Weber, deplores the trend toward the bureaucratization of society and the restrictions this imposes on the individual. Unlike Weber, however, Whyte advocates a deliberate course of action that he urges on the organization

¹ For example, such concepts related to reference group theory as “local” versus “cosmopolitan” orientation in Merton (1957a: 387–420); “job bureaucrat” versus “functional bureaucrat” in Riesman (1949); and “institution” versus “science” orientation in Davis *et al.* (1954: 5ff.), and Whyte (1956).

man. While disclaiming that his book is a plea for nonconformity, he nevertheless exhorts the organization man to resist the pressures of the organization even if it means the loss of his job (Whyte, 1956: 10–12).

Although he repeatedly acknowledges that the organization is the creation of man and can be changed by man, he virtually never criticizes the architecture, so to speak, of the organization; nor does he address any proposals for reform to the “architects” of the organization, but rather to the individual organization man (Whyte, 1956: 13). As he puts it, “The fault is not in organization, in short; it is in our worship of it. . . . To say that the incubus lies in organization itself would be partially correct, but it would also be somewhat futile” (Whyte, 1956: 13, 217; Greenwalt, 1959: 28). Obviously, it need not be “futile” if the structure of the organization can be redesigned so as to counteract the ideology of the organization man.

Whyte’s effort to eliminate the evils of the ideology of the organization man by exhorting him to fight the organization is misplaced. Assuming that the ideology of the organization man is as pervasive a phenomenon in industrial and other types of organizations as Whyte claims, a logically prior question is one pertaining to the social-structural sources of this ideology.

STRUCTURAL SOURCES OF THE IDEOLOGY OF THE ORGANIZATION MAN

The growth of the ideology of the organization man may be viewed in part as a product of the historical transformation of the structure of industrial management. With the progress of industrialism, owner-managers have been steadily replaced by salaried managers (Bendix, 1956: 226–244). Instead of relying largely on inheritance and wealth as a mode of recruitment, as was the case when owner-managers or entrepreneurs dominated industry, corporate managers are typically nonowners who are recruited, presumably, because of their managerial ability and skills.

The work of management, however, is not presently founded on a distinct, recognizable, and transmissible body of knowledge and skills. This means, among other things, that managerial performance cannot be objectively evaluated. In this respect, management differs from virtually all other occupations in an industrial organization. Whereas manual occupations involve a body of well-defined skills that readily lend themselves to appraisal, this is not true of the management occupation. Professional occupations in an industrial organization, such as engineers and scientists, may be viewed as occupying an intermediate position—on an hypothetical scale of objective-subjective criteria of performance appraisal—between the occupations of manual workers and management. Both the high order of complexity of the body of knowledge and skills of a profession and the difficulty of evaluating the end product complicate the process of performance appraisal. In contrast, the relatively low order of

complexity of the knowledge and skills required of a manual occupation facilitates an objective evaluation of the end product.

In the absence of objective criteria for evaluating the performance of junior and middle management, subjective criteria tend to predominate, such as degree of loyalty to the objectives of the organization. The value placed on organizational loyalty is due both to the lack of professionalization of management and the need for a principle to ensure the recruitment of trustworthy managers who will participate in critical decision making or in the execution of decisions, in spite of their owning only a small amount of stocks or none at all in the enterprise. As a student of business administration puts it:

There is little knowledge as to the particular abilities which are required for a manager to act successfully in a specific situation. Even where certain abilities have been ascertained as desirable, it is seldom that they can be expressed in terms which are quantifiable. They are seldom established on the basis of what the man can do; rather they are usually expressed in terms of what he *is*, e.g., sincere, capable, loyal, patient, trained, experienced, etc. These attributes are difficult to relate to later performance, however measured. (Kircher, 1959: 71)

Another consequence of the absence of objective and rational criteria is the tendency for a system of sponsorship or patronage to develop. Organization men are motivated to become the protégés of superordinates in the hope that they will sponsor them for promotion to a higher level. A system of sponsorship, however, is fraught with insecurity. Problems develop when a sponsor loses his position of authority because of organizational changes, retirement, resignation, and the like, or when a protégé is dropped by a sponsor (Martin and Strauss, 1956). In short, one of the major sources of the ideology of the organization man lies in the structure of the management occupation in industrial organizations.

A second and closely related source of the ideology of the organization man is the nature of the hierarchical structure of corporate management. The immediate superior of the junior or middle manager has the authority to issue various types of orders as well as to appraise his subordinate's performance and recommend negative or positive sanctions. Thus, in effect, he is in a position to determine his subordinate's fate in the organization, with the latter having no protection against arbitrary and capricious authority (Whisler, 1958). In the event of a conflict between a junior or middle executive and his superior, there is no institutionalized procedure for impartially adjudicating the dispute. In the absence of an impersonal procedure that provides a set of norms for resolving conflicts, the superior may exercise power or personal influence instead of legitimate authority. This is in sharp contrast with the case of a manual worker vis-à-vis a foreman in an organization in which there is a collective bargaining agreement between management and a trade union. Given such an agreement, a multistep grievance procedure culminating in arbitration is provided for resolving conflicts between the manual

worker and his superior. This procedure, in effect, limits the authority of the worker's superordinate by providing the worker with a court of appeals, so to speak. The established right to appeal a governmental decision adversely affecting one's interests and the right to a fair and impartial hearing are important procedural components of the constitutional guarantees of due process of law (Forkosch, 1958; Evan, 1960).

By comparison with the unionized manual worker, whose occupational rights are protected by the grievance machinery provided by the collective bargaining agreement, the junior or middle manager is at a distinct disadvantage: Lacking the right of appeal, he is at the mercy of the decisions of his immediate superior who, in his decisions regarding his subordinates, may function simultaneously as judge, jury, and prosecutor (Haire, 1956: 67). From this perspective, the organization man appears to be a member of a "new proletariat" in present-day American industry. He does not have the protection of an outside occupational organization, as unionized employees do; nor does he have a code of professional ethics to govern his relationships with his superordinates, his peers, and his subordinates; nor does he have the protection of colleague control, as professionals do, to counteract hierarchical control. Since the nature of his work makes objective evaluation of performance difficult, and since he lacks the right of appeal, he is, therefore, highly motivated to fulfill his superior's expectations—even at the expense of his own ideas and wishes—in order to ensure a positive appraisal and the associated rewards. However, to fulfill his superior's expectations, which are often ambiguous, he learns to avoid any actions he suspects might displease his superior. Such actions may range from joining or not joining the Masons to the choice of style of clothing (Dalton, 1959: 178–181). The organization man's process of adapting himself to the expectations and behavior patterns of his superior and of relinquishing, if necessary, his own preferences and judgments may be likened to the conformity patterns experimentally observed by Sherif (1958) and Asch (1958). Subjects faced with an ambiguous and unstructured situation—as in the case of the auto-kinetic effect—tend to adjust their statements of perceptions to one another; and some subjects faced with an unambiguous and structured situation relinquish their true statement of perceptions of reality in favor of a false statement of perceptions made by others.

In brief, the ideology of the organization man has at least two interrelated sources: occupational and organizational. Occupationally, the amorphous character of managerial work encourages the use of subjective criteria for evaluating performance, including a pattern of sponsorship or patronage and a concern for the organizational loyalty of subordinates. Organizationally, in the absence of norms of procedural due process of law, such as the right to appeal the decision of a superordinate, junior and middle managers are encouraged to become conformists, developing an oversensitivity to the expectations of superordinates in order to ensure positive appraisal and corresponding rewards. Otherwise put, the ideology of organization man is an adaptation to certain normless elements in the work situation of junior and middle managers.

SOME CONSEQUENCES OF THE IDEOLOGY OF THE ORGANIZATION MAN

The consequences of the ideology of the organization man are presumably—in the absence of systematic data—largely dysfunctional from the viewpoint of both the individual executive and the industrial organization and society at large. Several illustrative and hypothetical dysfunctions will be considered.

From the standpoint of the individual executive as well as the organization, the ideology tends to inhibit original and creative effort that, by definition, departs from prevailing practices and hence runs the risk of not being approved by a superordinate. Accordingly, the industrial organization must increasingly rely on staff specialists for new ideas rather than on line management. This entails a loss to the organization of a potential source of valuable innovations, which is not to gainsay the advantages of having staff specialists concern themselves principally with problems of innovation.

Another consequence of this ideology for the individual as well as for the organization is the paradoxical combination of high job immobility with high job insecurity. By definition, the organization man's loyalty induces him to devote his entire career to his organization. He has a "local" rather than a "cosmopolitan" orientation; in other words, his reference group is his organization rather than the occupation of management that transcends a given organization. This tends to result in a high degree of job immobility among executive personnel. From the point of view of the organization, low turnover may be highly advantageous, provided the manager's performance is judged to contribute to the organization's effectiveness. In the event that his performance is judged to interfere with the organization's attainment of its goals, the organization may transfer him to an innocuous position, induce him to resign, or dismiss him (Stryker, 1954). In the absence of due process of law for junior and middle managers, and we might even add top managers, those who are judged undesirable for whatever reasons—relevant or irrelevant—may be discharged without an opportunity for a fair hearing.

Another consequence of the ideology that is dysfunctional for the organization is the tendency of the organization man to restrict upward communication to material calculated to enhance his self-image and simultaneously not to threaten the superordinate in any way. On the basis of studies of experimentally created hierarchies, we would expect that organization men who are upwardly mobile—and this is presumably true of the bulk of junior and middle managers—would be strongly motivated to censor upward communication to ensure positive appraisal and corresponding rewards (Kelley, 1951; Cohen, 1958). Such action, of course, complicates the planning and coordination problems of top management.

Yet another effect of the ideology on the individual executive, related to job insecurity and the pressures for restriction of upward communication, is the tendency for discrepancies to develop between overt and covert behavior. Covert nonconformity occurs provided the probability of the discovery of such action is

low. Where covert nonconformity does not occur, we may expect to find covert disbelief in the legitimacy of the authority exercised by the superior together with overt behavioral conformity. The resulting degree of cognitive dissonance, due to the discrepancy between overt conformity and covert disbelief, on the part of the organization man may be considerable. To reduce the resulting dissonance, the organization man can convince himself that his overt behavior is quite satisfactory after all, that is, by changing his cognitions so that they are consonant with his overt behavior (Festinger, 1957: 1-31).

The effect of the ideology of the organization man on society as a whole is probably more elusive than its effects on the individual manager and on the industrial organization, although nonetheless real. As a result of the premium put on cautious behavior calculated not to offend the preferences and expectations of a superior, the organization man may tend to transfer this behavior pattern and principle of behavior to his community life and engage in only conformist activity. This approach to community life lessens the chances of successfully coming to grips with new and complex social problems requiring innovative rather than conformist behavior. The consequences of this ideology for society as a whole may be especially marked in view of efforts by corporations to encourage management to increase their participation in community affairs.

A related effect of the ideology may be observable in the family values and child-rearing patterns of the organization man. The values of seeking approval from superiors, of teamwork, and of "togetherness" may be transplanted from the corporation to the family (Miller and Swanson, 1958).

POTENTIAL COUNTERVAILING FORCES TO THE IDEOLOGY OF THE ORGANIZATION MAN

Two potential countervailing forces to the ideology of the organization man are the institutionalization of norms of procedural due process of law for corporate management and the professionalization of management.

A combination of "open door" policies, "ombudsman" programs, and related developments suggests the process of institutionalizing norms of due process within corporate management. Such a development has been stimulated by the need for resolving conflicts between staff and line management. The high frequency of such conflicts in the absence of unionization among staff specialists are conducive to the growth of norms of procedural due process. Such a development could pave the way for the extension of this institution to all corporate management.

Another source of influence favoring an extension of procedural due process is external to the corporation. There is a growing awareness of the need for restricting the powers of the corporation. In particular, it is being argued that the courts and the legislatures should extend constitutional guarantees of procedural due process to the corporation or that corporations should develop their own "supplementary constitutional systems" (Berle, 1954: 77ff.; Selekman, 1959). The venerable doctrine of due process, which dates back at least to the

Magna Carta, includes a complex of procedural safeguards against the exercise of arbitrary and unlimited power (Mott, 1926: 1–29). These norms seek to ensure that disputes are resolved impartially and fairly, and includes the right of all parties to a conflict to be heard, the right to confront and to cross-examine witnesses, and the right to introduce evidence in one's behalf. Incorporated in the Bill of Rights in 1791, the Due Process Clause protects the citizen against the arbitrary exercise of power by the federal government. These rights were extended about 75 years later, by means of the Fourteenth Amendment, to citizens vis-à-vis their state governments. Since then this doctrine has diffused or is in the process of being diffused to other spheres of government; and, according to Berle and others, it is also likely to diffuse to the realm of private organizations.² Thus, it is possible that pressures internal and external to the corporation may develop to institutionalize norms of procedural due process for all employees who come under its jurisdiction (Greenwalt, 1959: 24–26).

Another potential countervailing force to the ideology of the organization man is the professionalization of management. In spite of the plethora of discussions for several decades about the professionalization of management, there has been very little progress in this direction (Metcalf, 1927; Bowen, 1955). The term “professional manager” at present largely denotes a salaried manager—as distinct from an owner-manager—who pursues his occupation with the aid of a developed and acknowledged body of transmissible knowledge and skills and a code of professional ethics.

Potential pressures for the professionalization of management stem largely from ongoing technological changes. In the past, technological changes in industry have “machined out” various manual occupations. However, the age of computer technology and operations research may mean that many jobs now performed by junior and middle executives may in the future likewise be “machined out” (Ackoff, 1955; Leavitt and Whisler, 1958). The future executive, as has been suggested, will probably need to have a body of technical knowledge and skills in addition to having an overall-view of the organization's needs, being a “generalist,” and having human relations skills (Ackoff, 1955). As the knowledge and skills of future management become more complex, training for this occupation will probably become more intensive and prolonged, that is, more professionalized. A set of objective and technical standards for appraising performance may thus develop; appropriate professional organizations may then emerge; methods of colleague control may grow; and in general a code of ethics may come into being to cope with conflicts among managers and to govern their relationships with other occupational and interest groups inside and outside the corporation.

Either of the two potential countervailing forces to the ideology of the organization man may be conducive to the development of the other. As between these two possible developments, it appears more likely that professionalization of management will be conducive to the institutionalization of norms of due process than the reverse.

² See Berle (1954), Chayes (1960), Mason (1960), Miller (1959), and Ferry *et al.* (1959).

Short of the institutionalization of norms of procedural due process for junior and middle management, several other mechanisms may upon inquiry prove to have an equivalent function. The first is the institutionalization of the right of job transfer within a company. This would enable a manager, finding himself in an unsatisfactory authority relationship with his superior, to overcome this problem without suffering the consequences of adjustment to an arbitrary superior.

A related mechanism is job rotation. To the extent that this becomes an institutionalized procedure, it affords the executive an opportunity to manifest his abilities to more than one superior and in different organizational situations, which in turn increases the chances of a more objective appraisal of his talents.

A third mechanism that might be a functional substitute for the norms of due process is an increase in the opportunities for intercompany mobility. One of the major impediments to such mobility is the absence of vested pension rights. This discourages job changes because of the financial loss entailed. The vesting of pension rights for executives—such as already exists among university professors—if it should ever develop, would probably betoken a significant measure of progress toward the professionalization of management. Only an occupation with cosmopolitan values would encourage the institutionalization of such a practice.

CONCLUSION

The virtual absence of norms of procedural due process of law for corporate management obviously makes field research of an observational or documentary nature difficult. However, the literature of industrial sociology provides at least one significant “deviant case” worthy of intensive investigation. According to Jaques (1951: 51–53, 61–63), the Glacier Metals Company in London has an appeals system that covers all of its employees. An understanding of the structure and functioning of this unique mechanism of due process of law may throw light on various problems, such as the preconditions for the emergence of such an institution in industry as a whole, and the relationship between the ideology of the organization man and due process of law.

In addition to an analysis of this deviant case—and the heuristic potential of deviant case analysis has been established in the masterly study of the International Typographical Union by Lipset, Trow, and Coleman (1956)—three other types of research are possible. First, since procedural due process is institutionalized in all federal civil service organizations, a comparison between a government agency similar in function to an industrial organization that lacks due process would be instructive. Possible candidates for such a comparative study are a government research laboratory and an industrial research laboratory.

Second, a field experiment on due process would obviously be of great value. There are enough precedents for field experiments in industrial organizations, such as those conducted by Coch and French (1948), Jackson (1953), Morse and Reimer (1956), and Ross (1957), to make this approach feasible.

Finally, laboratory experimentation is also feasible. Implicit in our analysis is the hypothesis that there is a negative correlation between the degree of objectivity of criteria for evaluating performance and the tendency to conform to a superior's expectations and preferences. Does this hypothesis hold true under an experimentally induced condition involving a mechanism of procedural due process of law, for example, when subjects are granted the right to appeal the decision of a superior? This hypothesis has been tested in laboratory experiments simulating a set of relevant organizational properties.³

³ This type of laboratory experiment, unlike most studies in the literature on small group research, entails the explicit simulation of status relationships and other organizational properties. See, for example, Clark and Ackoff (1959). For another example of a laboratory simulation of a facet of organizational structure, see Evan and Zelditch (1961: 883–893; Evan, 1971).

Hierarchical Conflicts in Research Organizations

A variety of role conflicts occur in organizations. Some are due to role strain, as we have seen in Chapters 3 and 4; some are due to role ambiguity; and still others are due to role overload (Kahn *et al.*, 1964a). Yet another type of conflict involves a clash of expectations and perceptions between the incumbents of two roles. In this chapter, superior-subordinate conflicts are compared in a government and an industrial research laboratory. As in Chapter 4, the presence or absence of due process norms helps to explain the occurrence of interrole conflicts in an organizational context (Scott, 1964).

Among the various theoretical perspectives in organizational research, the legal or jurisprudential one does not figure prominently, despite the pioneering work of Weber (1947a, 1954) and Ehrlich (1936). A legal or jurisprudential perspective refers to the analysis of organizational phenomena with the aid of concepts developed for analyzing the legal system of a society. This may involve drawing an analogy between the legal system of a society, a relatively macroscopic social system, and the legal system of an organization, a relatively microscopic social system. When this analogy first suggested itself to me, I used the terms "public" and "private" legal system to distinguish between the two levels of analysis (Evan, 1962b).

Sociologically, a legal system consists of a least (1) a body of norms governing the expectations and actions of the members of a given system; and (2) a set of specialized statuses to which are allocated different normative functions. The set of norms of a legal system may differ along various dimensions, as, for example, the extent of knowledge and acceptance of norms on the part of those to whom they apply. The set of specialized statuses of a legal system may also differ in various respects, as, for example, in number and pattern of organization. Regardless of the variations in dimensions, three normative functions are performed by the specialized personnel of any legal system: legislative, judicial, and executive. By a legislative function is meant the authority to innovate norms; by a judicial function, the authority to interpret existing norms in the course of adjudicating disputes; and by an executive function, the authority to enforce norms with the aid of institutionalized sanctions. In combination, the norms and the specialized legal statuses constitute the major components of the structure of a legal system (Evan, 1962b: 167ff.). It is evident that such a conception is applicable to both public and private legal systems. Moreover, it directs attention to the nature of the relationship between public and private legal systems (Evan, 1962b: 175–180).

This mode of conceptualization suggests several observations. First, the principle of separation of powers underlying the structure of our legal system is rarely observed in designing industrial organizations.¹ Second, executives of various types of organizations are often preoccupied with legislative and executive functions—namely, with what are normally designated as policy-making activities and with the implementation of policies—to the neglect of the judicial function. Third, although management may in fact devote a substantial portion of its time to the settling of interstatus and interunit disputes, the prevailing mode of adjudication is generally on an ad hoc basis. Management is neither self-conscious about the judicial function it is performing nor is it inclined to formalize and establish it as an impersonal control mechanism (Blau and Scott, 1962: 176–183). Fourth, the failure to institutionalize methods of adjudicating conflicts probably leads to the neglect of problems of injustice experienced by the personnel of an organization. Finally, a consideration of the judicial function in industrial organizations points to the importance of examining a critical feature of the judicial process of a democratic society, that is, procedural due

¹ For a notable exception to this assertion, see Brown (1960).

process of law, which consists of a body of norms protecting the citizens against the arbitrary and capricious exercise of authority.

Thus, the model of a legal system as applied to formal organizations directed my attention to the question of the consequences for organizational behavior of the presence or absence of due process norms for different categories of personnel. In Chapter 4, interest was focused on the structure of authority relations involving junior and middle executives that appeared to be devoid of due process norms, and the effect of this authority structure on the ideology and behavior of the "organization man." On theoretical grounds, the absence of due process of law was hypothesized as having dysfunctional consequences for the individual, the organization, and the society. What these consequences are, in fact, requires empirical investigation.

In the course of a theoretical analysis, it was noted that

since procedural due process is institutionalized in all federal civil service organizations, a comparison between a government agency similar in function to an industrial organization that lacks due process would be instructive. Possible candidates for such a comparative study are a government research laboratory and an industrial research laboratory. (see page 75 in this book)

The purpose of this chapter is to report some findings of such a comparative study. A research and development organization is a particularly fruitful setting in which to study the effects of differing degrees of institutionalization and internalization of due process norms, because it is in precisely such organizations, that is, in knowledge-producing organizations—as distinct from routine- and crisis-oriented organizations—where the lack of such norms might have discernible effects (Suojanen, 1963).

PROCEDURE

In the course of a comparative study of project-group conflicts in a government and an industrial research organization, it seemed relevant to include several questions on whether the respondents perceived that they had a right to appeal the decisions of their superiors in case of conflict. The respondents in both organizations were nonsupervisory engineers and scientists, first-line supervisors, and second-line supervisors. The source of the data was a self-administered questionnaire. Four questions provided some relevant data. The first question was:

Without divulging any classified information, please describe briefly a problem, difficulty, or conflict which you have had with the supervisor of your project group in the past several months.

This question elicits information on the nature of superior-subordinate conflicts. The second question read: "How was this problem handled?" This question yields information on the mode of conflict resolution. The third question was:

When such a problem arises, does a subordinate have the right to take the matter up with someone at a higher level of management if he/she is dissatisfied with the way his project supervisor has handled the problem?

This question taps the respondent's perceptions as to the institutionalization of a due process norm. If the response was "yes," the respondent was asked to indicate whether he/she thought such a right was beneficial or detrimental. If the respondent's reply was "no," he/she was asked to indicate whether he/she thought such a right would be beneficial or detrimental. This question, the fourth and last, is interpreted as a measure of the respondent's internalization of the value of due process.

It should be noted that a self-administered questionnaire may be a strategic way of exploring this delicate problem area because of the anonymity involved. Yet after completing the questionnaire, some of the respondents admitted that they were reluctant to answer these questions fully and candidly for fear that their replies would jeopardize their job. Perhaps an unstructured personal interview that succeeded in conveying to the respondent the nonjudgmental and confidential character of the research effort might induce him/her to be even more candid than with a self-administered questionnaire.

RESULTS

Incidence of Conflict

In view of the delicate nature of the first question, which asks respondents to describe a conflict with their superior, it is noteworthy that 48 percent of all respondents admitted to having experienced such a conflict.² The frequency of such conflicts might be expected to diminish as organizational status increased; that is, from a nonsupervisory engineer or scientist to a first-line and a second-line supervisor, because a measure of authority would afford the status occupant some protection against acts of injustice. Instead, as Table 5.1 shows, there is, surprisingly, a highly significant positive association between incidence of reported conflicts and organizational status in both the government and the industrial laboratory. In the government laboratory, 37 percent of nonsupervisors reported conflicts, 44 percent of the first-line supervisors, and 74 percent of the second-line supervisors; in the industrial laboratory, the proportions for the three statuses are 41 percent, 47 percent, and 82 percent, respectively.

This finding lends itself to two possible interpretations: either the higher the status, the more superior-subordinate conflicts are actually experienced, or else the higher the status, the less reluctant one is to admit to having experienced such conflicts because of the increment of authority that accompanies higher status in the organizational hierarchy. Regardless of which interpretation is valid,

² This figure resembles the finding in a nationwide survey of role conflict in Kahn (1964a: 57).

Table 5.1 Incidence of Reported Superior-Subordinate Conflicts by Organizational Position

Reported Conflicts	Nonsupervisory Engineers and Scientists		First-Line Supervisors		Second-Line Supervisors	
	%	N	%	N	%	N
Government laboratory^a						
Yes	37.2	(23)	44.4	(12)	74.0	(20)
No	62.8	(39)	55.6	(15)	26.0	(7)
Industrial laboratory^b						
Yes	41.0	(53)	47.0	(13)	82.1	(23)
No	59.0	(76)	53.0	(15)	18.9	(5)

^a $\chi^2 = 10.44$; 2 d.f., $p < .005$.^b $\chi^2 = 15.57$; 2 d.f., $p < .0004$.

the finding suggests the need for the protection of a due process norm for both high- and low-status occupants.

Types of Conflict

As for the substance of superior-subordinate conflicts, three types were anticipated: (1) technical conflicts, that is, disagreements over means or ends pertaining to the work of the engineer or the scientist; (2) administrative conflicts, that is, disagreements concerning procedures, policies, and allocation of resources; and (3) interpersonal conflicts resulting from personality clashes, barriers to interpersonal communication, and so on. The respondents' descriptions of conflicts were, in fact, coded almost entirely into two categories: technical and administrative. There were so few instances of interpersonal conflicts, as Table 5.2 shows, that they are ignored in the discussion. Perhaps this finding is to be expected because interpersonal conflicts are probably generated by technical and administrative conflicts; in addition, they are probably more difficult to describe or resolve than either technical or administrative conflicts.

Table 5.2 relates types of superior-subordinate conflict to organizational position in the two laboratories. Although the interstatus differences within each laboratory are not statistically significant, there is a tendency for technical conflicts to decrease with status and administrative conflicts to increase with status. This finding is explainable in terms of the functions performed by the three status groups. If the data in Table 5.1 are related to those in Table 5.2, an explanation suggests itself as to why first-line and second-line supervisors report more conflicts: they are more likely to have administrative conflicts because of the very nature of their jobs.

In the absence of a due process mechanism, superior-subordinate conflicts are either unilaterally settled or else remain unresolved—if the situation permits this alternative. Where a due process norm is institutionalized, the parties to a

Table 5.2 *Types of Superior-Subordinate Conflict by Organizational Position*

<i>Types of Superior-Subordinate Conflict</i>	<i>Nonsupervisory Engineers and Scientists</i>		<i>First-Line Supervisors</i>		<i>Second-Line Supervisors</i>	
	%	N	%	N	%	N
Government laboratory						
Technical	16.1	(10)	11.5	(3)	3.7	(1)
Administrative	21.0	(13)	19.2	(5)	59.3	(16)
Interpersonal	00.0	(0)	11.5	(3)	7.4	(2)
No conflict	62.9	(39)	57.8	(15)	29.6	(8)
Industrial laboratory						
Technical	17.1	(22)	7.4	(2)	10.4	(3)
Administrative	17.8	(23)	40.7	(11)	72.4	(21)
Interpersonal	6.2	(8)	00.0	(0)	00.0	(0)
No conflict	58.9	(76)	51.9	(14)	17.2	(5)

conflict either settle it themselves to their mutual satisfaction, or it is adjudicated with the aid of a third party. An examination of the responses to the question on how the conflict was handled indicated that they could be coded as unilaterally resolved, as bilaterally or multilaterally resolved, or as unresolved. The hypothesis that type of conflict resolution is associated with organizational status, that is, that unilateral resolution is negatively associated with status and bilateral or that multilateral resolution is positively associated with status, was not confirmed. No consistent or statistically significant findings emerged. Apart from the question of interstatus differences, a higher proportion of personnel in the government laboratory report bilateral or multilateral conflict resolutions, whereas a higher proportion of personnel in the industrial laboratory report unresolved conflicts. Although these differences also are not statistically significant, they can be explained by the findings in Table 5.3 on perceived institutionalization of a due process norm.

Perception of Institutionalization of a Due Process Norm

In response to the question about whether a subordinate has a right to appeal the decision of a superior if he/she is not satisfied, it was expected that a higher proportion of government than industrial personnel would acknowledge that they had such a right, because federal civil service agencies have a formal appeal system, whereas the industrial laboratory studied did not.

Table 5.3 shows that the respondents' perception of the institutionalization of a due process norm in the two laboratories was in accord with organizational realities. Although interstatus differences were not statistically significant within

Table 5.3 Perceived Institutionalization of a Due Process Norm

<i>Perceived Institutionalization of a Due Process Norm^a</i>	<i>Government Laboratory</i>		<i>Industrial Laboratory</i>	
	<i>%</i>	<i>N</i>	<i>%</i>	<i>N</i>
Yes	96.2	(102)	74.2	(127)
No	3.8	(4)	25.8	(44)

^a $\chi^2 = 20.52$; 1 d.f.; $p < .001$

either laboratory, a significantly higher proportion of government than industrial respondents asserted that they had a right to appeal their superior's decisions. What is indeed surprising about Table 5.3 is the relatively high proportion of industrial laboratory respondents who perceived that a due process norm was institutionalized. Evidently, an informal appeal system exists as far as these employees are concerned. How such an informal system comes into being and who performs the adjudicative or mediative function are intriguing questions.

Regardless of the extent to which a due process norm is formalized or institutionalized, unless it is internalized, it will have little if any effect on conflict resolution or on behavior in an organization. Because of the difference in the institutionalization of a due process norm in the two laboratories, a corresponding difference in internalization of a due process norm was expected. Instead of differences between the two laboratories, however, the data (Table 5.4) showed interstatus differences in internalization in both laboratories. That the proportion of respondents in the industrial laboratory manifesting internalization of the value of a due process norm is as high as it is suggests that the informal appeal system may be quite effective. This interpretation could have been tested had the respondents been asked whether they had ever in fact availed themselves of the right to appeal a superior's decision.³ Such a question would have provided another measure of internalization, possibly even more revealing than whether they regarded the right to appeal helpful or detrimental.

Resolution of Conflicts

The combined differences in institutionalization and internalization of a due process norm in the two laboratories may result in differences in the way conflicts are resolved. In the government laboratory, as Table 5.5 shows, there is no statistically significant relationship between type of conflict and mode of conflict resolution; in the industrial laboratory, there is a tendency for technical conflicts to be resolved bilaterally or multilaterally and for administrative conflicts to be resolved unilaterally. Is this difference related to the functioning of a formal versus an informal appeal system?

³ For an example of the use of such a question, see Evan (1962a: 197ff.).

Table 5.4 Internalization of a Due Process Norm by Organizational Position

Internalization of a Due Process Norm	Nonsupervisory Engineers and Scientists		First-Line Supervisors		Second-Line Supervisors	
	%	N	%	N	%	N
Government laboratory^a						
Yes	84.4	(49)	61.9	(13)	52.1	(12)
No	15.6	(9)	38.1	(8)	47.9	(11)
Industrial laboratory^b						
Yes	82.7	(72)	100.0	(18)	40.7	(11)
No	17.3	(15)	00.0	(0)	59.3	(16)

^a $\chi^2 = 10.14$; 2 d.f.; $p < .006$.^b $\chi^2 = 26.64$; 2 d.f.; $p < .00001$.

How a conflict is resolved, particularly whether it is unilaterally resolved, should affect the internalization of a due process norm. As shown in Table 5.6, a higher proportion of government respondents with multilaterally resolved conflicts manifest internalization of the appeal procedure than do respondents with unilateral or unresolved conflicts. In the industrial laboratory, on the other hand, a higher proportion of respondents with either unilaterally or multilaterally resolved conflicts have internalized a due process norm than those who have experienced an unresolved conflict. Although not statistically significant, these differences between the two organizations may also be a function of a formal versus an informal appeal system. Under a formal system, an experi-

Table 5.5 Relationship Between Type of Superior-Subordinate Conflicts by Type of Conflict Resolution

Type of Conflict Resolution	Technical Conflict		Administrative Conflict	
	%	N	%	N
Government laboratory				
Unilateral	35.3	(6)	41.4	(12)
Multilateral	23.5	(4)	34.5	(10)
Unresolved	41.2	(7)	24.1	(7)
Industrial laboratory				
Unilateral	33.3	(8)	48.9	(23)
Multilateral	50.0	(12)	27.7	(13)
Unresolved	16.7	(4)	23.4	(11)

Table 5.6 *Type of Conflict Resolution by Internalization of a Due Process Norm*

<i>Internalization of a Due Process Norm</i>	<i>Unilateral</i>		<i>Multilateral</i>		<i>Unresolved</i>	
	<i>%</i>	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>	<i>N</i>
Government laboratory						
Yes	89.5	(17)	100.0	(10)	80.0	(8)
No	10.5	(2)	00.0	(0)	20.0	(2)
Industrial laboratory						
Yes	68.4	(13)	66.7	(18)	50.0	(8)
No	31.6	(6)	33.3	(9)	50.0	(8)

ence with multilateral conflict resolution may strengthen the internalization of a due process norm, whereas under an informal appeal system, an experience with either a multilateral or a unilateral conflict resolution may help develop a commitment to the value of a due process norm.

The data of the present survey do not afford an opportunity to test the hypothesis that the absence of an institutionalized norm of due process has dysfunctional consequences for the individual and for the organization. This is but one of the unanswered problems in this neglected area of research. Another critical question is: under what conditions is the norm of due process internalized by enough of the employees of an organization so that if subordinates avail themselves of their right of due process, they will not be victimized by their superior?

CONCLUSION

One noteworthy finding of this study is that a very high proportion of the respondents in the industrial laboratory, which does not have a formal appeal system, perceived a due process norm to be institutionalized and had internalized such a norm. This points to the functioning of an informal appeal system. Such an informal mechanism is probably a response to pressures to constitutionalize the corporation.

Rapidly changing technology, resulting from economic competition and advances in science, is increasing the need for engineering and scientific personnel in industry. The steady influx of such professionals with values quite different from those of manual and clerical workers confronts management with the need to reexamine its managerial doctrines. It also probably encourages the emergence of a new generation of management more attuned to the new technology and to the values of engineers and scientists. Under these circumstances, management may be more receptive to the institutionalization of due process

mechanisms, whether on grounds of economic rationality or on ideological principles derived from the ethos of a democratic society.⁴

By studying problems of justice in the corporation with the same thoroughness (although not with the same methodology) as legal scholars use, social scientists may discover the conditions favoring the emergence of formal and informal appeal systems and thus possibly provide guidelines for constitutionalizing industrial and other kinds of organizations. In conducting such research, social scientists would contribute to the growth of a legal or a jurisprudential theory of organization.

⁴ For two outstanding studies of changes in the ideology of management, see Bendix (1956); and Sutton *et al.* (1956).

Power, Conflict, and Constitutionalism in Organizations

The exercise of power, which is often arbitrary in organizations, and the prevalence of interrole conflicts are further analyzed in Chapter 6 with the aid of Hirschman's (1970) seminal framework set forth in his book *Exit, Voice, and Loyalty*. To clarify the relationship between power and conflict and the conditions under which organizational members have recourse to the options of "exit" or "voice," I introduce three structural concepts: due process norms, organizational citizenship, and fiduciary management (see Chapter 20). In turn, these concepts are combined into a composite concept for the design of organizations, namely, organizational constitutionalism. Each of the components of constitutionalism, I hypothesize, constitutes a point on an evolutionary scale, with due process norms at the lower end of the scale, organizational citizenship at the midpoint, and fiduciary management at the higher end of the scale. To illustrate the applicability of the concept of organizational constitutionalism, I analyze three types of organizations—religious, military, and academic—which vary in the degree to which they have institutionalized the components of constitutionalism.

That power and not property is the source of all manner of conflicts is a proposition more widely accepted now than several decades ago, let alone in the nineteenth century. With the abolition of the propertied classes, Marx believed a new social system would be ushered in, which in turn would pave the way for a new history of man. Weber, on the other hand, perceived a relentless process of rationalization of the Western world, principally by means of the application of rational-legal systems of administration. Notwithstanding their lack of ownership of the instruments of administration, officials of bureaucracies in market economies as well as in centrally planned economies exercise extensive authority. Weber's (1947a: 331–332) thesis, in retrospect, is in harmony with that of Berle and Means (1968) concerning the separation of ownership and control in the modern corporation. In an increasing proportion of large corporations, managers wield “power without property.” It is also clear that the “iron law of oligarchy” is at least as applicable to the modern corporation as it is to such voluntary associations as trade unions and socialist parties with which Michels (1949) was concerned.

It was Dahrendorf (1959), however, who, in rejecting Marx's theory of class conflicts based on property relations, argues for replacing it with one based on authority relations. Following in the footsteps of Weber, Dahrendorf (1959: 168) contends that “authority is a universal element of social structure. It is in this sense more general than . . . property.” The differential distribution of authority in all types of organizations gives rise to social conflicts. Although Dahrendorf restricts his analysis to authority, that is, legitimate power, a justifiable reformulation of his position is that power, whether legitimate or illegitimate, is a “universal element of social structure.” For if it is true that legitimate power tends to generate conflicts between superordinates and subordinates, then illegitimate power, *a fortiori*, should have a similar effect.¹ Other social scientists have since focused on the relationship between power and conflict, notably Kahn (1964b: 2–3), who asserts that “the exercise of power . . . necessarily creates conflict” and “the existence of conflict (in the sense of disagreement or opposition) gives rise to the exercise of power.”

In the context of organizations rather than total societies, when conflicts arise in the course of the exercise of power, the modal response of subordinates is conformity or submission to the dictates of power. There are, however, two other possible responses, “flight” or “fight,” or, in Hirschman's (1970) more neutral terminology, “exit” or “voice.” Although Hirschman, from his vantage point in economic theory, looks upon these options as responses to an organization's deterioration, they may also be relevant—particularly for organization theory—whenever nontrivial conflicts occur, even if unaccompanied by an organization's declining performance. For example, what options are exercised when Roman Catholic priests question the doctrine of celibacy or when students demand participation in the governance of colleges and universities?

¹ A justifiable criticism of Dahrendorf's (1959: 157–205) theory of conflict is that without introducing the concept of illegitimate power, it is hard to see how his “quasi-groups” are transformed into “interest groups” and thence into “conflict groups.”

Hirschman observes that in many organizations either exit or voice predominates as the mode of reaction of dissatisfied and activist members. In those organizations in which both exit and voice are realistic possibilities, he assigns an important role to loyalty in determining the member's response. Except for a small minority of blindly loyal members for whom neither exit nor voice is a likely choice, the greater the loyalty, the higher the probability that members will select voice and defer exit. However, Hirschman is evidently not content to give us a purely positive theory of the option between voice and exit, grounded in a social-psychological concept of loyalty. At several junctures in his essay, he ponders the normative question of whether there are institutional mechanisms that would strengthen voice as an option, when it needs strengthening, and enhance the likelihood of exit, when that is a desirable response.

When an organization arouses but ignores voice while it would be responsive to exit, thought must be given both to making exit more easy and attractive by appropriately redesigned institutions and to making the organization more responsive to voice. The approach to the improvement of institutional designs that is advocated here widens the spectrum of policy choices that are usually considered and it avoids the strong opposite biases in favor of either exit or voice which come almost naturally to the economist and political scientist, respectively. . . . Corrective policies obviously include efforts to make the organization more responsive to exit, *but also* efforts to have the members of the organization switch from exit to voice. In this fashion, the range of possible remedial measures is broadened. (Hirschman, 1970: 123–124)

Assuming that efficient institutional designs were invented or borrowed, an organization would, in effect, approximate Hirschman's (1970: 120–126) "elusive optimal mix of exit and voice."

One proposal for an efficient institutional design is for an organization to borrow a set of norms from the Anglo-Saxon legal system known, somewhat ambiguously, as "due process of law." My purpose in this chapter is to explore some of the structural ramifications of this proposal for institutional redesign, thus in the process specifying the relationship between power and conflict.

DUE PROCESS NORMS

Unlike biological systems, which have homeostatic mechanisms to regulate the internal processes of organisms in relation to their environment, social systems such as organizations generally lack comparable self-regulatory mechanisms, thus suffering from a tendency toward instability. In other words, negative feedback mechanisms are poorly developed or else fail unexpectedly, in which case the system succumbs to positive feedback effects.

An illustration of the inadequacy of existing negative feedback mechanisms in various organizations is the way in which hierarchical conflicts are often dealt with, that is, conflicts between occupants of superordinate and subordi-

nate positions. Although not all organizational conflicts are traceable to one source, a case has been made by Dahrendorf (1959) and others for hierarchical differentiation—which in varying degrees underlies the structure of all organizations—as generating one major category of conflicts. As a consequence, power, legitimate as well as illegitimate, is exercised to some degree at each level in the hierarchy, giving rise to dissensus as regards goals, objectives, rewards, and their underlying values. The exercise of power at different levels of an organization, with its attendant conflicts, results in a cycle of conflict that may escalate in intensity unless conflict-regulating mechanisms are activated (Baldrige, 1971). Due process norms, collective bargaining, and third-party intervention in the form of mediation or arbitration are examples of conflict-regulating mechanisms. As Simmel (1955), Coser (1956), and others have observed, conflicts have positive as well as negative consequences for a social system. Among the positive consequences of conflict is the growing awareness on the part of the members of an organization that the available conflict-regulating mechanisms are inadequate (see Chapter 5). One such mechanism, due process norms, warrants special consideration.

In the Anglo-Saxon legal system the venerable doctrine of due process, which dates back at least to the Magna Carta, provides a mechanism for a fair and impartial regulation of conflicts. As incorporated in the Fifth and Fourteenth Amendments to the U.S. Constitution, the due process clause protects the citizen against the arbitrary exercise of power by the federal and state governments. This complex of norms includes the right of all parties to a dispute to a timely notice of the issues or charges, the right to a hearing, the right to counsel, the right to confront witnesses, the right to cross-examination, the right to introduce evidence in one's behalf, and so on. Such procedural safeguards in the handling of conflicts illustrate what Vickers (1972) calls a "humanized institution." They serve the indispensable function in a democracy of limiting the exercise of arbitrary power.

Although the courts have generally interpreted the due process clause in a *procedural sense*, they have also developed the concept of *substantive* due process. This concept refers to constitutionally guaranteed rights of "life, liberty, and property" and the multiplicity of rights to which citizens are entitled by law. They therefore may not be deprived of any of these substantive rights unless they are accorded procedural due process (Forkosch, 1958).

A plausible consequence of this evolving doctrine, even for private organizations not subject to the protections of the Fifth and Fourteenth Amendments, is a tendency to circumscribe the exercise of power. As occupants of positions of power in private legal systems become increasingly sensitive to the far-reaching significance of procedural and substantive due process of law, they may decide to wield their power in a restrained and self-conscious manner (Evan, 1962c). Correlatively, the occupants of subordinate positions in private legal systems, upon discovering the potential functions of due process norms, may individually or collectively assert a rightful claim to them. Rights and duties of members tend to become formalized, thereby augmenting the autonomy of subordinates and reducing the discretionary power of superordinates.

The increasing institutionalization of due process norms, whether in public or private organizations, brings to the fore an interrelated problem that has hardly received the attention it deserves: under what conditions do members of an organization acquire “organizational citizenship”? On the face of it, this seems like an odd question to raise. It presupposes that an organization not only has an internal or a private legal system separate from that of the state, as I have argued elsewhere, but that it also constitutes a “sovereignty” (Evan, 1962c). Organizations, public and private, do in fact exercise sovereign powers over their members, including those tantamount to life and death. The power of dismissal or refusal to admit to membership may threaten a member’s livelihood, social status, and self-esteem. Excommunication from a church or denial of the sacraments because of heretical views illustrates the sanctioning power of a private organization.² Confronted with a grievance involving discharge from employment, labor arbitrators are reluctant to sustain the penalty because they regard it as the functional equivalent in industry of capital punishment (Skilton, 1952: 29). Under such circumstances, do members have the status of “citizens”?

ORGANIZATIONAL CITIZENSHIP

Not unlike the concept of due process of law, citizenship is an evolving concept referring to a cluster of the rights and duties of members of a given polity. In its modern meaning, citizenship has been the focus of an expanding set of rights emphasizing constitutional safeguards and deemphasizing unlimited loyalty. In tracing the evolution of citizenship in England in relation to social class, Marshall (1950: 28–29) states that

citizenship is a status bestowed on those who are full members of a community. All who possess the status are equal with respect to the rights and duties with which the status is endowed.

Marshall (1950: 10–11) distinguishes three dimensions of citizenship: civil, political, and social:

The civil element is composed of the rights necessary for individual freedom—liberty of the person, freedom of speech, thought and faith, the right to own property and to conclude valid contracts, and the right to justice. . . . The institutions most directly associated with civil rights are the courts of justice. By the political element I mean the right to participate in the exercise of political power, as a member of a body invested with political authority or as an elector of the members of such a body. The corresponding institutions are parliament and councils of local government. By the social element I mean the whole range from the right

² The institutionalization of due process norms and organizational citizenship both entail an increase in the level of formalization of organizational structure that in turn may involve unanticipated costs in performance as well as in adaptability to change.

to a modicum of economic welfare and security to the right to share to the full in the social heritage and to live the life of a civilized being according to the standards prevailing in the society. The institutions most closely connected with it are the educational system and the social services.

A reasonable candidate for a fourth dimension of citizenship is "organizational citizenship," by which I mean a complex of procedural and substantive rights accruing to an individual by virtue of membership in any organization less inclusive than the nation-state. Not only are such rights institutionalized, but they are accorded to *all* categories of members in *equal* degree. It does not follow, however, that organizational citizenship presupposes equality in *all* respects but only in stipulated rights of a procedural and substantive nature. The substantive rights comprising organizational citizenship may consist of the functional equivalents of Marshall's civil, political and social distinctions at the nation-state level. In organizations in which membership provides a source of livelihood, organizational citizenship may revolve around a congeries of property rights to the job.

Diametrically opposed to membership based on a concept of organizational citizenship is one grounded on an unlimited commitment unaccompanied by any clearly protected rights. Total allegiance and a serf-like fealty are demanded of members in organizations that Coser (1967, 1974) aptly refers to as "greedy organizations" or "greedy institutions":

The modern world . . . continues to spawn organizations . . . which . . . make total claims on their members and which attempt to encompass within their circle the whole personality. These might be called "greedy institutions," insofar as they seek exclusive and undivided loyalty and they attempt to reduce the claims of competing roles and status positions on those they wish to encompass within their boundaries. Their demands on the person are omnivorous.

Such organizations may, for example, as does the Catholic Church, require celibacy of their priests, so as effectively to minimize the divisive pull of family obligations. They may, as in the case of Utopian communities, attempt to counteract tendencies toward "singularization" or "particularization" by disapproving of dyadic attachments which have the potential of withdrawing energy and affect from the community. They may, as in monastic and Utopian communities, erect strong boundaries between insiders and outsiders so as to hold the insider in close bonds to the community to which he owes total loyalty. (Coser, 1974: 4-5)

In between the extremes of greedy organizations, on the one hand, and those providing for organizational citizenship, on the other, is a broad spectrum of organizations making functionally specific and segmental demands of its members with few, if any, clearly specified rights of membership. The relatively small proportion of organizations affording organizational citizenship suggests that it is still a nascent concept in most types of organizations regardless of the type of political and economic system in which they are embedded. As Walzer (1970) observes in his analysis of corporate authority, members of various private organizations, even in democratic societies, are "subjects" rather than "citizens."

A common justification—which Walzer rejects—for the authoritarian regimes in such organizations is the tacit consent of members and their option to leave if they are displeased. Commenting on Walzer's analysis, Hirschman (170: 84n) advances the hypothesis that “the greater the opportunities for exit, the easier it appears to be for organizations to resist, evade, and postpone the introduction of internal democracy even though they function in a democratic environment.”

One impetus for the growth of organizational citizenship is the expanding role of the ubiquitous multinational corporation. Although it is incorporated in a particular nation-state and its ownership is usually concentrated in a given country, its operations transcend many a national boundary. In transporting capital, technology, goods, and personnel from one country to another, the multinational corporation has encountered various obstacles stemming from economic and political demands of national sovereignty (Vernon, 1971). Small wonder, then, that some multinational corporations are beginning to speculate about organizational citizenship and a legal status divorced from that of any nation-state. Thus, for example, the president of Nestlé speaks of the desirability of building “Nestlé citizenship” in the framework of an “anational corporation” (Barnet and Muller, 1974). And the chairman of Dow Chemical Company speculates on the means of implementing his ideal of corporate citizenship:

I have long dreamed of buying an island owned by no nation, and of establishing the World Headquarters of the Dow Company on the truly neutral ground of such an island, beholden to no nation or society. (Gerstacker, 1972a)

Assuming that organizational citizenship is not entirely an idealized or utopian construct, what kinds of executives are likely to assume the leadership of organizations exhibiting the institutions of organizational citizenship? Would they have an entrepreneurial or a managerial orientation, that is, a preoccupation with promoting the interests of the owners of the enterprise or of their own self-interests? Or would they have a fiduciary orientation?

FIDUCIARY MANAGEMENT

In their classic study of the *Modern Corporation and Private Property*, Berle and Means (1932) consider the legal position of management as the separation of ownership and management becomes even more pronounced. They observe that

the law holds the management to certain standards of conduct. This is the legal link between ownership and management. . . . The three main rules of conduct which the law has developed are: 1) a decent amount of attention to business; 2) fidelity to the interests of the corporation; 3) at least reasonable business prudence. . . . the law sums up the three rules . . . by saying that the management stands in a “fiduciary” capacity towards the corporation. (Berle and Means, 1932: 196–197)

The legal concept of a fiduciary imposes duties of loyalty and trust on the part of persons performing this role on behalf of beneficiaries.

One who holds a position of trust, i.e., whose function it is to act for the benefit of another as to matters relevant to the relation between them is deemed in law to be a fiduciary; as such, he is held to the highest standards of conduct—standards which are essentially different from the less demanding obligations imposed upon parties to a transaction which is negotiated at “arm’s length,” e.g., a buyer-seller relationship. (Evan and Levin, 1966: 73)

In short, the fiduciary responsibility involves an ethical commitment of service to beneficiaries that sociologists studying the professions generally associate with the professional-client relationship. Codes of ethics in the various professions impose an ordinance of self-denial to ensure that professionals do not exploit their clients in the face of ample opportunities—and temptations—to do so (Evan and Levin, 1966: 74).

The sociological import of the fiduciary role as applied to executives of various types of organizations has yet to be explored. It implies, among other things, that those entrusted with the responsibility for directing the fortunes of an organization will do so with an appreciation of the various “constituencies” whose interests are often incompatible. Instead of making self-serving decisions calculated to protect a self-perpetuating oligarchy or advance the interests of a particular constituency, fiduciary managers seek to reconcile the conflicting interests of the various categories of members comprising the “organization as a coalition,” and thus promote the interests of the organization as a corporate entity (Cyert and March, 1963).

In contrast to fiduciary managers, “entrepreneurial” managers govern on behalf of the owners of the corporation, that is, their behavior is guided exclusively by the classical profit-maximization principle of the theory of the firm. A third type of management role, the “discretionary” manager, has been conceptualized by Williamson (1965b, 1970) and others in the course of revising the theory of the firm. Beginning with an assumption of self-interest seeking, Williamson (1965b: 38–60) identifies pecuniary as well as nonpecuniary values of discretionary managers, who, he argues, seek to maximize a utility preference function that includes various expense preferences for staff and emoluments. To ensure an opportunity for discretion on the part of managers, Williamson (1965b: 36) adds a “discretionary profit” component in the firm’s preference function, namely, “that amount by which earnings exceed . . . [a] minimum performance constraint” to satisfy the demands of the stockholders.

Thus far no one has succeeded in developing fiduciary management models or corporate welfare algorithms comparable to those Williamson has developed for managerial discretion. Until such models are developed, the standards of conduct of fiduciary management will constitute an ideal that can only be approximated but never attained. Fiduciary managers will of necessity fall back on various strategies of conflict resolution, such as mediation and arbitration, to reconcile conflicting interests of members of the corporation in the course of arriving at organizational decisions (Anonymous, 1974: 38).

Are managers of corporations as well as of other types of organizations sufficiently professionalized so as to perform their roles as fiduciaries, that is, with fidelity to all of their beneficiaries? Do managers conceive of all categories of members of the organization as their beneficiaries? Are stockholders the exclusive beneficiaries of the corporation, or do rank-and-file employees and customers qualify for this status as well? Similar questions can be asked of the managers of other types of organizations. For example, do trustees of a university, together with the president and the provost, have fiduciary obligations to the faculty only or to students and alumni as well?

Such questions in turn point to the need for clarifying the meaning of "membership" in various organizations. Do all categories of members of an organization qualify as beneficiaries of fiduciary managers? In the case of corporations, only stockholders are accorded the status of beneficiaries in common law. Rank-and-file employees, owing to the accomplishments of trade unionism in the twentieth century, probably do not consider themselves as beneficiaries of the corporation but rather as rightful *claimants*—by virtue of collective bargaining contracts—on the resources of the corporation. As for corporate managers, the fiduciary duties are far from crystallized in common law, any more than they are in corporate law or in the decisions of administrative agencies. The impetus for the further articulation of the responsibilities of fiduciary managers will probably come from ongoing conflicts over the social responsibility of the corporation (Epstein, 1972). Although the substantive issues in conflict vary from one type of organization to another, what they seem to have in common are claims to expanding membership rights, namely, growing pressures for organizational citizenship.

If we now combine the three concepts discussed above, namely due process norms, organizational citizenship, and fiduciary management, we have a composite concept for the design of organizations that I shall designate as "organizational constitutionalism" (see Chapter 5).

SOME HYPOTHESES ABOUT ORGANIZATIONAL CONSTITUTIONALISM

Does the composite concept of organizational constitutionalism and its components have any heuristic value for studying power and conflict in organizations? To justify an affirmative answer—which at this stage is in the nature of an assumption—I shall first consider the interrelationships among the components of constitutionalism.

The concepts forming organizational constitutionalism are not unrelated. A plausible hypothesis is that they constitute points on a cumulative, Guttman-like scale, with due process norms being at the lower end of the scale, organizational citizenship at the midpoint, and fiduciary management at the higher end of the scale. Organizations that have institutionalized organizational citizenship will also include in their structure due process norms; the converse, however, is not

likely to be true. And organizations guided by fiduciary management are very likely to have institutionalized both organizational citizenship and due process norms. If the hypothesis about the components of organizational constitutionalism forming a cumulative scale is borne out empirically, one may in turn raise the related question as to whether the points on the scale constitute stages of organizational evolution. Such an hypothesis is plausible provided the mechanisms accounting for the transition from one stage of evolution of organizational constitutionalism to another can be uncovered.

To be sure, the phenomena of power and conflict can be observed in all organizations, but in all likelihood relatively few organizations reach even the first stage of constitutionalism. Reaching the first stage presupposes an environment conducive to such democratic norms emanating from the legal and political institutions of the society at large and a membership with sufficient leverage on management to institutionalize due process norms. Another factor that may trigger the process of constitutionalization is a crisis threatening the survival of an organization. By institutionalizing due process norms, conflicts are regulated with a semblance of fairness that in turn promotes loyalty and internal cohesion of the organization vis-à-vis a turbulent environment.

Once due process norms are established, they are not necessarily applied uniformly or fairly to all conflicts arising in an organization, in part because officials manning the hierarchical structure continue to exercise power, including arbitrary power, and in part because of the timidity of members to avail themselves of their rights. In other words, the obstacles to the effective implementation of due process norms in legal systems are twofold: insufficient degree of *institutionalization* of due process, largely because of excessive discretion exercised by officials, and insufficient *internalization* of due process norms on the part of the members (Evan, 1962a).

When an organization makes the transition to the next stage of constitutionalism and establishes a framework of membership rights that merits the designation of organizational citizenship, it is reasonable to infer that the due process norms will be shored up both as regards level of institutionalization and level of internalization. To lay the groundwork for organizational citizenship, a high level of articulation is required of procedural and substantive rights that are accorded to all categories of members in an organization.³

Organizations that have reached the midpoint of our hypothetical scale of constitutionalism can achieve a relatively steady state without moving further in the direction of fiduciary management. This may be due to one of several factors, such as a relatively transitory membership, a relatively successful level of organizational performance that, in effect, justifies the continuation of the prevailing mode of nonfiduciary management, and social-structural support for nonfiduciary modes of organizational leadership. A high level of organizational

³ "When I was a student in the University of Berlin many years ago they showed me the university jail which was separate from the town jail. In this academic hoosegow, distinguished men such as Bismarck had been confined when students. This was a revelation to me, for in my day the school authorities could throw a man out but they could not throw him in" (Merriam, 1944: 2, n. 3).

citizenship plus a crisis in organizational performance are probably at least two prerequisites for the further constitutionalization of an organization in the direction of fiduciary management.

Clearly, the foregoing discussion of the construct of organizational constitutionalism in evolutionary terms is highly speculative in character. It may, however, provide a framework for analysis as we examine some illustrative data from several types of organizations.

ILLUSTRATIVE DATA ON ORGANIZATIONAL CONSTITUTIONALISM

In the interest of exploring the applicability and usefulness of the composite concept of organizational constitutionalism and its components, I shall now consider some data on three types of organizations—religious, military, and academic—in the order of mention, since they vary correspondingly in degree of institutionalization of the components of constitutionalism. To the extent that the data permit, Hirschman's theoretical concepts of exit and voice will be employed, largely implicitly, in the analysis.

Religious Organizations

Of the many religious organizations, two will be considered from the vantage point of organizational constitutionalism: the Catholic Church and the Protestant Episcopal Church in the United States. Although different in numerous respects both organizationally and doctrinally, these churches have a comparable level of institutionalization of due process norms. Both churches have been buffeted by the winds of secularism that accompany the industrialization of a society. Whereas the adaptation process in the structure of governance, beliefs, and practices in the Episcopal Church has been slowly occurring for over a century, the pressures for change in the Catholic Church, both external and internal, had been largely dammed up until the Ecumenical Vatican Council II in 1962–1965 (Ference, Goldner, and Ritti, 1973: 182).

A variety of documents and encyclicals have since been promulgated that have provoked a movement for reform, including proposals for increasing the degree of institutionalization of due process norms (Coriden, 1956; Peters, 1965; Abbott, 1966; Ad Hoc Committee on Due Process, 1969). Organizational changes have also been instituted, such as synods of bishops to augment their collegial authority, senates or associations of priests at the diocese level to increase their power vis-à-vis bishops, and parish councils that include representatives of the laity. The overall thrust of these changes is to diminish the hierarchical and centralized authority structure and introduce mechanisms of collegial authority at all levels in the Church.

Another potential source of change is the Pontifical Commission for the Revision of the Code of Canon Law, named by Pope John XXIII in 1962,

which has been continuing its efforts since the conclusion of the Ecumenical Council II (Coriden, 1956: xiii). As part of this effort, the Canon Law Society of America has been active in exploring the unmet needs of due process in the Church. In their 1969 report they state that

the dignity of the human person, the principles of fundamental fairness, and the universally applicable presumption of freedom require that no member of the Church arbitrarily be deprived of the exercise of any right or office. . . .

The characteristics of a free man are precisely that he has rights, that he is not dependent for the enjoyment of his rights upon the good will of his superiors, and that his rights are effectively protected so as to be legally inviolable. The aim of "due process" is precisely to give such inviolability. For men of our time, the legal protection of inviolable rights in the Church would be an especially persuasive sign of that just freedom proclaimed by the gospel as belonging to all men. (Ad Hoc Committee on Due Process, 1969: 281-286)

Although canon law provides protection of various rights, they are primarily *de jure*, except for marriage conflicts, because of understaffed and centralized tribunals. In addition, Church law "recognizes no right to judicial review of administrative decisions of ecclesiastical authorities" (Ad Hoc Committee on Due Process, 1969: 287). To correct this glaring deficiency in the legal system of the Church, the Pontificia Commissio (1972) has formulated a proposal for a new canon of administrative procedure.

No such ferment has occurred in the Episcopal Church of the United States in recent years which, of course, does not mean that there are no conflicts that would benefit from the application of due process norms. According to canon lawyer Rightor (1972), Episcopal priests are not protected from arbitrary dismissal from their parish by a bishop. Nor does the relevant canon on the "dissolution of the pastoral relation" provide for the right of the priest to appeal a bishop's decision. Rightor (1972: 4) recommends revision of the relevant canon "to insure that the entire Episcopal Church, as well as the parties involved, develop a clearer understanding of the Canons, rules, standards, guides and equitable principles which are pertinent to the Bishop's decision in each case."

In view of the contrasts noted in the two churches, the markedly higher resignation rates of Catholic as compared to Episcopal priests during 1966-1969, for which data were obtainable, is not surprising (see Table 6.1). In a 1969 survey of Catholic priests, it is reported that among the crucial events contributing to the decision to resign from the priesthood are the encyclical on celibacy (27 percent), arbitrary reassignment by a superior (21 percent), and injustice by a superior (28 percent) (National Opinion Research Center, 1971: 319). Two other researchers on the Catholic Church conclude their studies with gloomy conditional predictions. Struzzo (1970: 105), who studied the relationship between professionalism and authority conflicts of Catholic priests, ends his report with the statement that

as long as the existing structures of the church remain in basic contradiction to the professionalization of the clergy, the most likely prospect for the near future is

Table 6.1 *Resignation Rates of Catholic and Protestant Episcopal Priests in the United States, 1966–1969*

Year	Catholic (Diocesan) Priests		Protestant Episcopal Priests ^a	
	Resignations Total (N)	Resignations %	Resignations Total (N)	Resignations %
1966	142	0.4	28	.0025
1967	306	0.9	30	.0026
1968	548	1.6	27	.0023
1969	753	2.0	24	.0020

Source: National Opinion Research Center (1971: 314, 316). The resignation rates are based on a statistical estimate of error due to sampling; the actual rates could very well be higher.

^aComputed from information in *Episcopal Church Annual, 1967–1971*, New York: Morehouse-Barlow.

an ever increasing rate of departures from the active ministry of those priests who espouse a professional model for the ministry that is in conflict with hierarchical authority.

And Kotre (1971: 195–96), who studied the social psychology of Catholics, some of whom defined themselves as *in* and others as *out* of the Church, concluded that

the Catholic Church is, after all, a voluntary social system; it is an organization that can be left. Indeed, only an act of the mind is necessary to cross the border. . . .

A voluntary organization that does not change enough to meet the expectations of some . . . can be left. . . .

The threat caused by loss of members in a voluntary organization, however, is much less obvious, and in an organization like the Catholic Church in which there is little direct data to tell precisely how many are leaving, the threat is vague, slowly communicated, and much less a force for movement. But it is, nevertheless, like violence, a threat to the life of the system.

In short, although efforts at institutionalizing due process norms are discernible in the Catholic Church as well as in the Protestant Episcopal Church in the United States, thus far a fairly rudimentary level of institutionalization has been achieved.

Military Organizations

Although military organizations are even more hierarchical and authoritarian than some churches, they have manifested considerable flexibility in adapting their structures and policies in the face of rapid technological changes in

weapons systems, new alignments in the international political system, and changing expectations and values of members of society at large. In industrialized societies with democratic political institutions, the armed forces are subordinate to civilian political elites and institutions (Janowitz, 1971: 24–26; Lang, 1972: 105–131). There are consequently tendencies to modify the authority structure and ideology of military organizations so that they are more consonant with those of civilian organizations.

Whether recruitment of personnel is by means of conscription or enlistment, there is evidently an increasing awareness by the military of the importance of protecting the rights of members of the armed forces. Safeguarding individual rights becomes one of the various inducements to the enlistment and retention of personnel as well as a strategy to ensure effective organizational performance. One of the institutions providing due process protection to personnel in the U.S. Army is the Inspector General (IG) complaint procedure (Evan, 1962a). All Army personnel—enlisted men and women, officers, and civilian employees, have a right to register complaints directly with an IG officer instead of taking them up with their immediate superiors. After inquiring about a complaint—defined in Army regulations as “an allegation of wrong or injustice suffered by the complainant, or of inconvenience, grievance, or injury incurred”—the IG recommends action to the relevant commanding officer (Department of the Army, 1951). A complainant who is not satisfied with the handling of the grievance may appeal to an IG officer at a higher echelon or to the Office of the Inspector General at the Headquarters of the Department of the Army in Washington, D.C.

By examining Army regulations pertaining to the IG complaint procedure during the past two decades, we can ascertain what changes, if any, have occurred and assess their significance. In Table 6.2 the pertinent regulations in 1951, 1960, and 1973 are compared with respect to four criteria: mode of submission of complaints, amount of discretion available to IG officers in processing complaints, requirement to disseminate information concerning the right to voice complaints with the IG, and degree of formalization of regulations.

With respect to all four criteria, the Army regulations were changed in those two decades so as to enhance the protection of the individual's right to due process. As of 1960, all personnel could submit complaints orally, in writing, or anonymously; and commanding officers are required to inform all personnel of their right to register a complaint with the IG. As of 1973, the IG officer's discretion in processing complaints was restricted, with the elimination of the following 1960 discretionary provision: “An inspector general may decline to act upon a matter which he deems to be trivial or inconsequential in nature” (Department of the Army, 1960: 21). Finally, the regulations have increased in their degree of formalization as reflected in the level of specificity of detail and in the number of paragraphs and subparagraphs in which the regulations are set forth.

Granted that these changes have occurred in the Army regulations, the critical question, of course, is how well they have been implemented. This would require an evaluation study consisting of at least two procedures: (1) an analysis of a sample of complaints lodged with IG officers at a sample of field

Table 6.2 *A Comparison of Army Regulations on the Inspector General Complaint Procedure, 1951, 1960, 1973*

<i>Criteria for Comparison</i>	<i>1951^a</i>	<i>1960^b</i>	<i>1973^c</i>
Mode of submission of complaints			
Oral	Yes	Yes	Yes
Written	Yes	Yes	Yes
Anonymous	No	Yes	Yes
Amount of discretion in IG officers in processing complaints			
Restricted	No	No	Yes
Requirement to disseminate information concerning the right of personnel to lodge complaints with the IG			
Stipulated	No	Yes	Yes
Degree of formalization			
Specificity of detail in regulations	Low	Medium	High
Number of paragraphs and subparagraphs in the regulations	15	27	31

^aDepartment of the Army (1951)
^bDepartment of the Army (1960)
^cDepartment of the Army (1973)

commands to ascertain how these complaints were processed, what action was recommended, and what action was taken by relevant commanding officers; and (2) a sample survey of Army personnel, such as was undertaken during World War II, to inquire into their experiences of injustice, their perceptions of the efficiency of the IG to redress wrongs, their fears of being victimized by superiors if they avail themselves of their right to air their grievances, and their degree of internalization of the values of due process (Evan, 1962a: 192–204).

In lieu of data from either of these procedures, a very crude indication of the functions performed by the IG is reflected in the data presented in Table 6.3. For the years 1968–1973, the absolute numbers of complaints are presented in six of the most frequently recorded categories: administrative deficiencies, mistreatment, discipline, racial discrimination, assignment or utilization, and transfer/reassignment (see Table 6.3 for the official definitions of these categories). These complaints were submitted directly to the Headquarters of the Inspector General in Washington, D.C., instead of to officers of the IG attached to various field commands. It is obviously impermissible to infer that these data are representative of the population of complaints submitted to the various field commands of the U.S. Army for 1968–1973. Although a cross-tabulation of the number of complaints by rank, function (Military Occupational Specialty, or MOS), type of field command, age, education, race, and sex would have been illuminating, no such analysis is possible given the simple frequency tabulation provided by the Office of the Inspector General.

It is noteworthy, however, that although the incidence of complaints between 1968–1971 tends to fluctuate, in 1972–1973 there was a noticeable de-

Table 6.3 Number of Complaints Received by the Office of the Inspector General of the Department of the Army, by Category, 1968–1973

Complaint Category ^a	1968	1969	1970	1971	1972	1973
1. Administrative deficiencies	671	594	629	577	615	457
2. Mistreatment	531	573	290	370	364	285
3. Discipline	317	508	458	444	403	279
4. Racial discrimination	199	326	405	406	300	206
5. Assignment or utilization	369	417	297	262	237	182
6. Transfer/reassignment	347	387	269	281	279	219

Source: Personal communication with the Office of the Inspector General, Department of the Army, Washington, DC, 29 April 1974.

^aThe categories as defined by the Office of the Inspector General are as follows:

1. *Administrative deficiencies.* Errors in records, except those pertaining to pay; errors in correspondence or other types of administration; excessive delay in completing administration directly affecting an individual's service; excessive delay in replying to correspondence; irregularities in administration; loss of records; nonreceipt of reply to inquiries; inadequate reply to correspondence; and other types [of] administrative deficiencies.
2. *Mistreatment.* Physical, verbal, or mentally degrading acts adversely affecting individuals, including harassment.
3. *Discipline.* Appeal of nonjudicial punishment denied; excessive delay in court-martial trial; inequity in punishment; rights denied, unjust punishment; etc.
4. *Racial discrimination.* Allegations that assignment or utilization, reduction in grade, disciplinary action, duty, promotion, rights denied, unjust punishment, etc. are racially motivated.
5. *Assignment or utilization.* Excessive hours or details; malassignment; improper MOS classification; not assigned duty in MOS; other allegations pertaining to an individual's current assignment or utilization.
6. *Transfer/Reassignment.* Compassionate request for transfer not processed; unreasonable delay in notification; too many transfers; abuse of assignment policy; reassigned to location incompatible with qualification or requirements.

cline in all categories, except for administrative deficiencies. Assuming that these complaint statistics emanate largely from field commands in Vietnam, they may be related to events following the Tet offensive and to the process of American troop withdrawal that was well underway in 1972 and was completed in 1973. The frustrations and agonies experienced in the closing years of America's involvement in the Vietnam War are reflected in the data in Table 6.4 on the rates of AWOL and desertion for the same period for which the IG complaint statistics are available, that is, 1968–1973. Both the AWOL and desertion rates steadily increase during 1968–1971, and—as in the case of the incidence of IG complaints—markedly decline in 1972–1973.

In summary, due process in the United States Army, as reflected in the functioning of the IG complaint procedure, was substantially strengthened in the past two decades, in part because of the major transformation of military law that occurred in 1950 with the passage by Congress of the Uniform Code of Military Justice. This trend is likely to continue, judging from the concern with problems of adapting the U.S. Army to the realities of a volunteer recruitment system. Two researchers on the Army have proposed that “some form of improved Inspector General or an Ombudsman channel of complaint could be established,” without indicating the direction of improvement (Bradford and Brown, 1973: 180). If the ombudsman model were taken seriously as a source of reforms, the IG, for example, would be granted more autonomy in its op-

Table 6.4 *AWOL and Desertion Rates per 1,000 in the U.S. Army, 1968–1973*

Year	AWOL Rate	Desertion Rate
1968	89.7	29.1
1969	112.3	42.4
1970	132.5	52.3
1971	176.9	73.5
1972	166.4	62.0
1973	159.2	52.1

Source: Personal communication with the Office of the Chief of Information, Department of the Army, Washington, DC, 12 March 1974.

erations than it currently enjoys as a staff organization. Surely, the experiences of some European countries that have military ombudsman systems—Sweden since 1915, Norway since 1952, and West Germany since 1957—would be instructive, inasmuch as their well-developed sets of substantive and procedural rights suggest that their armed forces have in effect reached the stage of “organizational citizenship” (Henkow, 1968; Ruud, 1968: 111–148; Loksa, 1968: 118–126).

Academic Organizations

The academic organization differs profoundly in its structure and its mission from military, religious, and other types of organizations. In the course of pursuing its two principal goals of teaching and research, the university, if not the junior college or the four-year college, elaborates its organizational structure in terms of departments, schools, committees, research institutes, and the like so that it cumulatively takes on the appearance of a complex bureaucracy with an hierarchical mode of coordination and administration. Yet a university is not predominantly a bureaucracy (Parsons and Platt, 1973: 127–128).

An alternative model of the university is that of a democratic association (Parsons and Platt, 1973: 129). The decision-making processes in committees, departments, faculty meetings, and various campus organizations often entail voting and an atmosphere of town-hall democracy in action. Yet, in view of the basic mission of the university and the high degree of inequality of knowledge and competence, it would be misleading to look upon the university as a democratic voluntary association governed by the principle of “one man, one vote” (Foote *et al.*, 1968: 80).

In its commitment to the principle of freedom of inquiry, to the discovery and dissemination of knowledge, and to rational discourse—namely, to the values of the “cognitive complex”—the university has the attributes of a moral community (Parsons and Platt, 1973: 22–89). Yet, in view of the internal so-

cial stratification with its accompanying dissensus, it would be inaccurate to characterize the university as primarily a moral community.

Indeed, if any one of the foregoing models accurately represented the realities of academia, it is doubtful that the campus disturbances of the 1960s would have escalated to the level of disruption and violence that they did. University administrators, exercising their bureaucratic authority, would have been more effective than they were in managing the conflicts; institutional mechanisms of a democratic polity would have succeeded in bringing the conflicts to a halt when they first erupted; and the moral norms of the community would have been persuasive in transforming the conflict from a "fight" to a "debate" (Rapoport, 1960).

It is precisely because the university organization is based on an *admixture* of organizational principles, reflecting potentially incompatible interests, that it was so difficult to regulate the conflicts of the 1960s. The rival principles of organization are rooted in the three major internal constituencies of the academic organization: bureaucratic authority on behalf of the administration, collegial authority in support of the faculty, and "participatory democracy" in the interest of the student. Small wonder that the epidemic of campus protests and demonstrations, triggered by the Free Speech Movement at Berkeley in 1964, brought about a crisis in the governance of the university that stimulated various efforts at restructuring and redirecting the organization.

The initial response of many university administrators to campus unrest consisted of disciplinary action, often summary in nature, without the benefit of any due process protections. For example, in the fall of 1964 eight leaders of the Free Speech Movement at Berkeley were summarily suspended for violating a rule, long in abeyance, concerning on-campus solicitation of funds for off-campus political action (Lipset and Wolin, 1965: 109–110; The President's Commission on Campus Unrest, 1971). And at Columbia University, shortly before the massive sit-in demonstration began in the spring of 1968, leaders of the Students for a Democratic Society submitted to President Grayson Kirk a petition, signed by 1,700 students, requesting that the university sever its relations with the Institute of Defense Analyses. Kirk responded by placing the six leaders of SDS on probation for violating his ban on indoor demonstrations. "The six students thereupon requested an open hearing before a tripartite judicial board, and were refused" (Trimberger, 1973).

Other responses to campus confrontations included the convening of special meetings of the faculty, the passing of special resolutions, and at some universities, the appointing of "commissions of inquiry." At Berkeley, the Study Commission on University Governance noted that

the liberalization of the rules governing political activity on the campus, the increased sensitivity of the campus to due process in disciplinary proceedings, the slowly growing receptivity to educational experimentation . . . all of these gains have been due, entirely or in part, to the politics of conflict. (Foote *et al.*, 1968: 19)

The authors conclude their report by developing a set of "basic regulations governing enactment and enforcement of campus rules" (Foote *et al.*, 1968: 173–203).

At Columbia University, a Fact-Finding Commission was appointed to inquire into the demonstrations in the spring of 1968 (Cox Commission Report, 1968). Commenting on President Grayson Kirk's refusal to grant a public hearing to the SDS leaders whom he placed on probation, the report states that

in a period in which public attention has been focused upon procedural safeguards in criminal proceedings, students have become rightly concerned about procedural safeguards in academic discipline. Their perquisites as students, and, during the current era of selective military service, their status as students, may even attain life-or-death importance. (Cox Commission Report, 1968: 96)

The Columbia report further observes that

the governance of the tens of thousands of people who compose Columbia University requires systematization through uniform rules and established organs and agencies. In their absence, arbitrary power flourishes. Power, in turn, encourages recourse to improvisation under pressure. (Cox Commission Report, 1968: 36)

Such reports have prompted universities to institute two types of reforms designed to reinforce due process norms. First, to provide a formal mechanism for communicating complaints, an office of ombudsman has been established on more than 100 campuses (Mahoney, 1974). According to one occupant of this office:

the Ombudsman's job is to be an accessible, objective, and responsive auditor in a setting that is sometimes so impersonal that in his attempt to find relief from frustration an individual may encounter only new frustration. Receiving and examining complaints from members of the university community—students, staff, administrators, faculty—the Ombudsman attempts to secure, where called for, either a satisfactory explanation or expeditious and impartial redress. His door, in short, is open to any member of the community with a grievance against the University or against anyone exercising authority. (Connaroe, 1971)

Annual reports of ombudsmen from various campuses indicate that a substantial number of individuals are making use of this new grievance procedure.

Second, the judicial systems of many colleges and universities have been reexamined and redesigned in the light of student protest to ensure that students are accorded due process protections in all disciplinary proceedings (Lunsford, 1970: 330–331). According to a survey of 558 colleges and universities conducted in 1969 by the National Association of Student Personnel Administrators, about three-fourths or more of the institutions included various procedural safeguards in their disciplinary proceedings (see Table 6.5). This finding was confirmed in a 1970 survey by the American Civil Liberties Union of 153 college and university presidents, which found that “the overwhelming majority of the presidents reported that students were entitled to due process in cases that might lead to suspension or expulsion” (Handler, 1970).

Table 6.5 *Procedures in Student Disciplinary Cases in a Sample of Colleges and Universities, 1969*

<i>Procedural Safeguards</i>	<i>Percentage of Institutions Having Procedural Safeguards</i>	<i>Number of Institutions</i>
The accused student is:		
Orally informed of charges	96	542
Given written statement of charges	73	537
Informed of procedures and rights	97	541
Provided with names of witnesses	73	521
Permitted legal counsel	49	515
Allowed other counsel	86	524
Allowed to call witnesses	97	529
Allowed to ask questions of witnesses	98	533
Given explanation for decision	97	544
Permitted right of appeal when decision has been made by:		
a) an administrative officer	96	502
b) a judicial body	89	515

Source: Dutton, Smith, and Zarle (1969: 6-9); table adapted from the version quoted in Fratoe (1974: 10-11).

These reforms in academic governance are part of a more general trend toward the formalization of policies and procedures to regulate the relationships among administration, faculty, and students, so much so that it has been referred to as the “judicialization” of the campus (Committee for Economic Development, 1973). One possible function of this trend is to protect the academic community from intervention by the courts—by means of judicial review—in its internal affairs.

Over the years, the courts’ role in the course of judicial review, in either denying or granting due process to students, has been of great significance. According to Van Alstyne (1971), since colonial times three legal models have been developed by the courts in deciding disciplinary cases. *In loco parentis*, a common law doctrine, was the earliest and most durable model that was applied by the courts in cases involving disputes between students and colleges. The rationale of the courts for almost invariably supporting the college was succinctly expressed in a Kentucky Supreme Court decision in 1913:

College authorities stand *in loco parentis* concerning the physical and moral welfare, and mental training of the pupils, and we are unable to see why to that end they may not make any rules or regulations for the government or betterment of their pupils that a parent could for the same purpose. Whether the rules or regulations are wise, or their aims worthy, is a matter left solely to the discretion of the authorities, or parents, as the case may be. (Van Alstyne, 1971: 238)

With the marked growth of institutions of higher education at the turn of the century, it became increasingly difficult for the courts to justify the doctrine

that the college was the surrogate parent of the students. Its replacement was the common law of contracts. Upon matriculation, students implicitly agree to a contract that they will conform to all existing rules of the institution and, in the event of a breach of contract, be subject to suspension or expulsion. The transition from *in loco parentis* to a contractual relationship did not enhance the protection of students against summary dismissals, so long as the university could point to a rule in its handbooks, however arbitrary, to justify its decision.

In recent years the third legal model, based on constitutional rights, has emerged in court decisions pertaining to public universities. Beginning with the landmark decision of *Dixon v. Alabama State Board of Education* in 1961, in which the court ordered the reinstatement of students dismissed from a college because of the failure to provide them with either a written statement of the charges or a hearing, the courts have enlarged the scope of procedural due process protections (Van Alstyne, 1971: 240). In addition, they have added other constitutional rights such as freedom of speech, freedom of association, freedom of assembly, and the right to privacy.

If the constitutional rights model becomes more generally accepted by the courts in cases involving the suspension and dismissal of students, and if it is extended from public to private universities, it will have the effect of further institutionalizing the student's right to "citizenship" on the campus. In analyzing the protests at Berkeley, one social scientist has noted that "the faculty and the administration have 'citizenship' in the university community, while students do not. . . . The very assertion of the students' right to enter into decision-making and policy matters constitutes a quest for citizenship" (Duster, 1970: 198, 200). To the extent that student aspirations are increasingly realized as a result of ongoing reforms in university governance, organizational citizenship will be well on its way to being institutionalized in the academic community.

The progress in recent years toward constitutionalizing the university may in addition pave the way for the emergence of institutions of "fiduciary management." University administrators would self-consciously accept their role as trustees of the organization in its entirety and as guardians of the interests of *all* constituencies who, by definition, constitute their beneficiaries. In the event of conflict among any of the constituencies, they would perform the role of independent and impartial arbiters. Committed to the values of higher education as well as organizational constitutionalism, they would seek to develop policies calculated to advance the welfare of the entire academic community.

In speculating about the future direction of the university, Perkins (1973: 260), a former president of Cornell University, refers to a "new style of management" sensitive to the needs for resolving conflicts and for satisfying the demands for internal and external accountability of performance. Some innovative university administrators are in effect already performing their role in accordance with the concept of fiduciary management. In fact, the academic

organization may prove to be a uniquely hospitable environment for the growth and development of the fiduciary style of management.⁴

ORGANIZATIONAL CONSTITUTIONALISM AND HIRSCHMAN'S THEORY

Having presented the concepts of and propositions on organizational constitutionalism and applied them to illustrative data on three types of organizations, I now return to the original question posed by Hirschman (1970): What institutional designs would encourage voice as an option when that is deemed significant and facilitate exit when that is desirable? Rather than rely entirely on loyalty as a mechanism for triggering voice and exit, Hirschman (1970: 86, 119, 120, 123) advocates improved "institutional designs." The burden of the foregoing discussion is that the structural redesign of organizations in accordance with organizational constitutionalism would generally strengthen exit and voice, particularly the latter, and thereby promote a better balance between them.

Organizations lacking any appreciable mode or level of constitutionalism would tend to have a high exit rate and a low voice rate. According to Walzer (1970: 26–28), this is a common phenomenon in many private organizations in democratic societies. Institutionalizing due process norms as a means of regulating conflicts would have the effect of diminishing abuses of power and generating a sense of fairness among the members of an organization. The resulting organizational climate would promote a strong disposition to exercise the option of voice and a disinclination to have recourse to exit (Evan, 1969a).

Institutionalizing organizational citizenship would likewise have the effect of stimulating voice inasmuch as the members of an organization would be accorded a relatively unambiguous set of procedural and substantive rights. It would also have a positive effect on exit. When the rights associated with organizational citizenship are honored in the breach, members would exercise either the exit or the voice option, whichever they find congenial or expedient. In a sense, organizational citizenship would encourage a movement for the transferability of a set of membership rights from the state as well as from one organization to another within the same class of organizations. This would be analogous to the situation of the college or university faculty member in the United States who decides to accept an offer from another institution of higher education. Among the person's organizational citizenship rights that are transferable are pension rights, by virtue of the fact that both institutions are likely to be affiliated with the Teachers Insurance Annuity Association, which provides for complete vesting and transferability of accrued pension benefits. No such organizational citizenship rights have yet been institutionalized in the corpora-

⁴ This concept should not be confused with the kindred idea of Parsons and Platt (1973: 18–19) that the university's commitment to the values of cognitive rationality makes it a fiduciary of the culture of the society.

tion, either for unionized employees or for the various levels of management, from the first-line supervisor to that of the president (Evan, 1969b).

With the emergence of fiduciary management—initially, in all likelihood, in such organizations as colleges and universities, trade unions, and professional associations—members would have the right, of course, to exercise the exit option, but because of the protections afforded by the new system of management, the rate of exit would probably decline. On the other hand, the level of voice would probably increase because of the new mode of decision making associated with fiduciary management.

The hypothesized relationships formulated above, with the usual *ceteris paribus* assumption, are summarized in Table 6.6. In other words, by supplementing Hirschman's theory with the concepts of organizational constitutionalism, it is possible to generate new and testable hypotheses. Although Hirschman premises his theory on the condition of a declining organization, clearly the level of organizational performance may be considered one of the parameters along with several others, such as type of organization (economic, religious, political, educational, military, etc.), level of economic development of the society in which the organization is embedded, type of political system of the society, and some attributes of the culture of the envionring society.

CONCLUSION

Power as a universal element of organizational structure and functioning often engenders conflicts; and conflicts, whether internally or externally induced, are occasions for the exercise and abuse of power unless institutional restraints are imposed. Organizational constitutionalism, as developed in this chapter, can perform the function of moderating the relationship between power and conflict. To the extent that organizations undergo a process of constitutionalization

Table 6.6 Hypothesized Relationships Between Hirschman's Concepts and the Components of Organizational Constitutionalism^a

Constitutionalism Continuum	Hirschman's Concept	
	Exit	Voice
Little or no constitutionalism	++	--
Due process norms	—	++
Organizational citizenship	+	+
Fiduciary management	—	+

^aA single plus connotes a moderate positive or direct relationship; a minus, a negative or inverse relationship; a double minus or double plus signifies a strong relationship.

that involves the postulated evolutionary stages of due process norms, organizational citizenship, and fiduciary management, abuses of power diminish in frequency, and whatever conflicts arise are subject to consensually valid methods of regulation. Exit, which according to Hirschman's theory is a common response in organizations suffering from a deterioration in performance, may also be a frequent occurrence in organizations plagued with an excess of illegitimate power. By boosting the level of voice in an organization, organizational constitutionalism can thus counterbalance exit as an attractive alternative.

To test the validity of Hirschman's theory as supplemented by organizational constitutionalism, comparative organizational research would be necessary. This would entail undertaking longitudinal studies of samples of different types of organizations in contrasting political, economic, and cultural settings. In addition, experimental methodology, in the laboratory as well as in the field, might be especially fruitful (Evan, 1971). Hirschman (1970: 146–155), in collaboration with others, has designed an intriguing laboratory experiment to test interrelationships of exit, voice, and loyalty in experimentally created small groups. It is likewise possible to design field experiments in ongoing organizations in an effort to verify Hirschman's theory by itself or in conjunction with organizational constitutionalism. Such research may prove significant for organization theorists in their quest for propositions applicable to all formal organizations regardless of culture and social structure.

PART III

INNOVATIVE PROCESSES

Organizational Lag

Organizational conflicts, which were analyzed in Part II, are in part due to the problems generated by hierarchical structures discussed in Part I. Unless resolved in a timely and creative manner, organizational conflicts tend to impair the performance of an organization. Organizational conflicts and declining organizational performance are two major internal sources of structural change (Hirschman, 1970; Meyer and Zucker, 1989). Other sources of structural change are external, such as the behavior of competitors, changes in technology, and changes in the legal and political systems of a society. If an organization is to adapt to both internal and external sources of change, it will have to introduce innovations, namely, deliberate efforts at modifying the organization.

In Chapter 7, the recurrent process of innovation is analyzed. Two types of innovation are distinguished: technical and administrative. Applying Ogburn's (1922: 200) theory of "cultural lag" to organizational phenomena, I develop a theory of "organizational lag," defined as a discrepancy in the rate of technical as compared with administrative innovations. Several hypotheses are derived from this theory, the most important of which is that there is an inverse relationship between organizational lag and performance. How to minimize organizational lag is a challenging problem to the practitioners of the art of management as well as to organization theorists. Progress in minimizing organizational lag will, in turn, contribute to a reduction of both interrole conflicts and role strains.

In a recent analysis of some problems of the American corporation, Davidow and Malone (1992:7), in effect, acknowledged the importance of the phenomenon of organizational lag: "Technology by itself, without commensurate changes in the rest of the corporation, will fail."

PROCESS OF INNOVATION

From a theoretical as well as a practical point of view, it is important to increase our understanding of recurrent processes in organizations. One such process is innovation, which I take to mean the implementation of a new idea, whether a product of invention or discovery. The relationship between the rate of innovation and the rate of growth is so widely assumed to be positive that a prodigious amount of effort is expended yearly by government, industry, and universities for the production of new ideas. In fact, the research and development laboratory is an organizational embodiment of the commitment to innovation.

That organizations differ in their response to proposals for innovations and to innovations proper is a reasonable assumption. To understand the basis for the differential response of organizations to new ideas, it may be helpful to begin with a distinction between technical and administrative innovations. By a technical innovation, I mean the implementation of an idea for a new product, process, or service; by an administrative innovation, I mean the implementation of an idea for a new policy pertaining to the recruitment and training of personnel, the allocation of resources, and the structuring of tasks, authority, and rewards.¹ This distinction between technical and administrative innovations relates to a more general distinction between technology and social structure.

OGBURN'S HYPOTHESIS OF "CULTURAL LAG"

Over 40 years ago, Ogburn (1922: 200ff.) advanced his well-known hypothesis of "cultural lag," which asserts that technology (material culture) advances at a more rapid rate than other social institutions (nonmaterial culture) (Ogburn 1922: 200ff.). The resulting lag between these two components of culture leads to various social problems. This hypothesis has been criticized on several grounds (Woodward, 1936). First, it presumes that technology is the principal determinant of social change and overlooks the effect of the values built into the culture of a society that may foster or hinder technological change. Second, measuring the rate of technological change relative to the rate of nontechnological change and the resulting amount of lag between the two types of change has proved to be

¹ Concerning the substantial number of administrative innovations in industry in the past few decades, Pascale (1990: 18) observes that "in the face of sagging fortunes, companies become notably more willing to experiment with new ideas. It might even be argued that an indicator of managerial panic is the consumption rate and shelf life of business fads. Over two dozen managerial techniques have waxed and waned since the 1950s. . . . The list reads like a Who's Who of business hype: Theory Z, Matrix, Managerial Grid, T Groups, Intrapreneurship, Demassing, and One-Minute Managing. To be sure, there are valid aspects to most of these ideas. What's wrong is that, overwhelmingly, companies apply them in a piecemeal fashion and shift from one to another too frequently. What is lacking is a grasp of the larger context in which they must be embedded."

exceedingly difficult. Third, because of the difficulties of measurement, the concept of cultural lag has tended to be used very loosely. Thus all conceivable social evils have been attributed to cultural lag.

CONCEPT OF ORGANIZATIONAL LAG

The concept of organizational lag advanced in this chapter need not have the same fate as the concept of cultural lag, possibly because a less aggregate level of analysis is involved. At the organizational as opposed to the institutional or societal level of analysis, it is probably easier to find operational measures of technical and administrative innovations. Following Ogburn's hypothesis of cultural lag, it seems worth exploring the analogous hypothesis that administrative innovations in organizations tend to lag behind technical innovations. The rationale for this hypothesis is that a new technical idea is likely to be viewed by management, especially higher levels of management, as more tangible and more proximately related to the profit goal of an industrial organization than is a new administrative idea. Not only is the potential payoff of an administrative innovation (e.g., a "dual ladder" system of promotion [Shepard, 1958] or an "open project time" policy for research and development personnel [Chollar, Wilson, and Green, 1958]) less certain than a technical innovation, but it is also likely to require more time to have any discernible effect. The reverse type of organizational lag, that is, one in which technical innovations lag behind administrative innovations, may also occur, although probably less frequently.

Both types of lag are subsumed in the definition of the concept of organizational lag: *a discrepancy in the rate at which new technical and administrative ideas are implemented in an organization*. Two hypotheses as to the functioning of the social system of an organization follow from the definitions of the two classes of innovation and of the concept of organizational lag. First, the slower moving class of innovations tends in the course of time to retard the faster moving class of innovations. Thus, if the Ogburn-inspired hypothesis is true, then administrative innovations that lag behind technical innovations will in due course retard the rate of technical innovations in an organization. Second, the greater the amount of organizational lag, the lower is the rate of organizational growth.

Members of an organization may adapt themselves to organizational lag by (1) developing a conformist or an apathetic ("ritualist" or "retreatist") orientation to their work; or (2) developing sub rosa strategies to circumvent organizational policies. Of the various modes of adaptation to organizational lag, the apathy of technical and managerial personnel is probably costlier to the objectives of an organization than unauthorized or rebellious conduct. In fact, out of the gamut of sub rosa activity current in organizations (e.g., research and development organizations) very often come significant technical innovations. Arthur K. Watson of IBM provides an excellent example of a "bootleg" project:

The disk memory unit, the heart of today's random access computer, is not the logical outcome of a decision made by IBM management. It was developed in one of our laboratories as a bootleg project—over the stern warning from management that the project had to be dropped because of budget difficulties. A handful of men ignored the warning. They broke the rules. They risked their jobs to work on a project they believed in. (Schön, 1963)

RESISTANCE TO TECHNICAL AND ADMINISTRATIVE INNOVATIONS

The sources of resistance to technical or administrative innovations are, among others, psychological and social in character. As for psychological sources of resistance, individuals differ in their tolerance threshold for new ideas. Since new ideas frequently involve elements of ambiguity, individuals with a low tolerance for ambiguity are unlikely to espouse new ideas. Scales measuring a traditional versus a modern orientation to new ideas have been constructed in various studies of innovation in farm communities and in social contexts other than a formal organization (Rogers, 1962: 62–70). With the help of such scales, it is possible to measure the attitudes toward new ideas of personnel at different levels in an organization.

A social source of resistance to organizational innovations is the prevailing system of functional specialization. Each department or division in an organization, with its unique tasks and responsibilities, tends to interpret any new idea, technical or administrative, in terms of its potential impact on the well-being of its members. Since the major functional areas, say, in a research and development organization (and its parent organization) have distinctive perspectives and different vested interests, it is reasonable to expect that they would also differ in their degree of resistance to *technical* innovations. Is the hypothetical rank ordering of functional areas on a continuum of resistance to *technical* innovations, shown in Figure 7.1, borne out in fact? How would the major functional areas be ordered on a continuum of potential resistance to *administrative* innovations? How much overlap in attitudes toward new ideas is there between the various functional areas in an organization? The less the overlap in attitudes toward a new idea among the various functional areas (i.e., the greater the difference in point of view), the lower is the probability of its being implemented. In other words, a new idea has a higher probability of being implemented in an organization if there is a substantial degree of overlap in favorable attitudes in the various functional areas. Moreover, the greater the overlap in favorable attitudes toward new ideas among the members of different functional areas (i.e., the more favorable the climate of innovation), the lower is the degree of organizational lag. Another possible indicator of an organization's climate of innovation is the ratio of technical innovations stemming from sub rosa activities to technical innovations stemming from authorized activities: the higher this ratio, the less favorable is the climate of innovation, and, in turn, the higher is the degree of organizational lag.

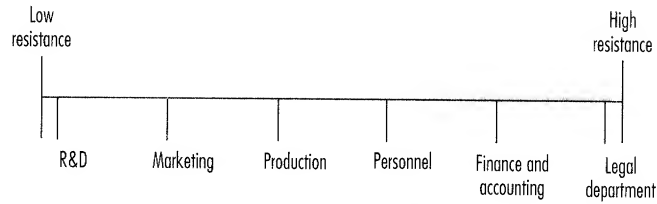


Figure 7.1 Hypothetical ordering of functional areas on a continuum of resistance to technical innovations.

Assuming that the concept of organizational lag can be operationalized, several important questions might be raised apart from its consequences for organizational growth. What are the structural features of organizations with a high degree of organizational lag? Do they tend to have a low rate of managerial succession? Are they generally large and centralized in structure? Do they operate on the assumption that new administrative ideas must trickle down the organizational hierarchy, whereas new technical ideas must trickle up the hierarchy (Fallers, 1954)?

CONCLUSION: MINIMIZING ORGANIZATIONAL LAG

In the sphere of consumption, particularly as regards women's fashions, a trickle-down theory has been advanced to describe and explain the process of dissemination of new consumption patterns. A new style is developed in or for the upper economic strata of a society and subsequently trickles down to the lower economic strata. In the sphere of formal organizations, management, especially of large organizations, appears to operate with a trickle-down theory of new administrative ideas and a trickle-up theory of new technical ideas. In small organizations approximating the entrepreneurial model, management probably subscribes to a trickle-down theory of both technical and administrative ideas. The other two possible combinations of innovative orientations (i.e., organizations that subscribe to a trickle-down theory of technical ideas but a trickle-up theory of administrative ideas and those guided by a trickle-up theory of both administrative and technical ideas) probably occur very infrequently but are theoretically of considerable interest.

If organizations are to minimize organizational lag—and hence maximize the chances of both administrative and technical innovation—the trickle effect with respect to both administrative and technical ideas would probably have to operate in *both* directions. What structural changes in tasks, occupational differentiation, work flow, information flow, rewards, and authority would encourage a two-directional trickle effect and thus minimize the degree of organizational lag? Only systematic programs of planned changes—introduced as “organizational experiments”—are likely to yield reliable and valid answers to this question (Evan, 1971).

Organizational Lag and Performance

The theory of organizational lag, presented in Chapter 7, was tested in a study of 85 public libraries reported in Chapter 8. The point of departure of this study was a sociotechnical perspective of organizations, namely, that a balanced adoption of administrative and technical innovations is more effective in helping organizations maintain or improve their level of performance than either a high rate of administrative or technical innovations alone (Emery and Trist, 1969).

The principal findings of this study are as follows: (1) libraries adopt technical innovations at a faster rate than they adopt administrative innovations; (2) administrative and technical innovations have a higher correlation in high-performance organizations than in low-performance organizations; (3) the degree of organizational lag is inversely related to organizational performance; and (4) the adoption of administrative innovations tends to trigger the adoption of technical innovations more readily than the reverse.

Is this theory of organizational lag valid only for nonprofit organizations? Clearly, the underlying rationale for the theory would seem to be applicable to all organizations, profit as well as nonprofit. To test whether this proposition is true for profit organizations as well, regardless of social and cultural contexts, a cross-national study of automobile assembly plants was initiated in 1989 in the United States, the Soviet Union, Japan, China, South Korea, and Germany.¹

¹ This study was initiated by William M. Evan in collaboration with Namshin Cho, Koya Azumi, Ikujiro Nonaka, A.W.M. Teulings, Werner von der Ohe, Barbara Hupfer, G. Osipov, I. Romanenko, and V. Levin.

According to Rogers and Eveland (1978), most studies of innovation focus on how innovations are communicated over time to individual members of a social system. Of the 2,400 innovation reports gathered for their review, they reported that only 17 percent dealt with how innovations are adopted by an organization, yet in most cases individual members can adopt innovations only when those innovations have already been adopted by their organizations.

Nearly all empirical studies of the organizational adoption of innovations either focus on the diffusion of innovations within one or more organizations (Walker, 1969; Romeo, 1975; Rapoport, 1978; Feller and Menzel, 1978; Levine, 1980), or probe the association between a measure of organizational innovativeness and various organizational variables (Evan and Black, 1967; Rosner, 1968; Mohr, 1969; Aiken and Hage, 1971; Kaluzny, Veney, and Gentry, 1974; Baldrige and Burnham, 1975). Very few have explored the relationship between the rate of adoption of innovations and organizational growth or performance. Moreover, most studies address only one category of innovation: technical innovations. All too often, studies neglect administrative innovations, which are equally essential to the growth and effective operation of an organization. Although several empirical studies (Evan and Black, 1967; Daft and Becker, 1978; Aiken, Bacharach, and French, 1980; Kimberly and Evanisko, 1981) have distinguished between administrative and technical innovations, none has compared the rate of adoption of two or more categories of innovations with each other or measured their impact on organizational performance.

It is our thesis that a balanced rate of adoption of both administrative and technical innovations is more effective in helping organizations to maintain or improve their level of performance than either administrative or technical innovations alone. The purpose of this study, therefore, was twofold: (1) to compare the rate of adoption of technical and administrative innovations; and (2) to explore the effects of these rates of adoption on organizational performance.

THEORETICAL FRAMEWORK

Definition of Innovation

Innovation is a widely used concept, and the term is variously defined to reflect the particular requirements and characteristics of a specific study. In this investigation, innovations were considered to be responses to environmental change or means of bringing about change in an organization. Organizations can cope with environmental changes and uncertainties not only by applying new technology, but also by successfully integrating technical or administrative changes into their organizational structure that improve the level of achievement of their goals (Rosner, 1968). Innovations at the organizational level may involve the implementation of a new technical idea or a new administrative idea. The adoption of a new idea in an organization, regardless of the time of its adoption in the related organizational population, is expected to result in an organizational

change that might affect the performance of that organization. Therefore, an idea is considered new in relation to the adopting organization, not in relation to its organizational population.

The unit of analysis in this study was the organization. The rate of adoption of innovations was therefore measured at the organizational level. When an innovation is considered as having been adopted depends on how innovations are defined in relation to the stages of the innovation adoption process. Considering the three stages of initiation, development, and implementation, an innovation may be considered as having been adopted once the decision about adoption has been made (Walker, 1969; Daft and Becker, 1978), once the implementation process has been initiated (Evan and Black, 1967), or, perhaps, after it has been successfully implemented (Mohr, 1969; Rowe and Boise, 1974). Since the intention was to relate the rate of adoption of innovations to the performance of an organization, a new idea was considered as an innovation when it actually began to be used. The management's decision to adopt a new idea does not necessarily guarantee its implementation. Other requirements, such as the acceptance of the new idea by organizational members or necessary modifications in the procedures, must be satisfied. Only after organizational members had begun to use a new device or system, or a new policy or program, could we assume that the adoption had taken place.

Accordingly, for the purposes of this study, an organizational innovation was defined as the implementation of an internally generated or a borrowed idea—whether pertaining to a product, device, system, process, policy, program, or service—that was new to the organization at the time of adoption (Thompson, 1965; Zaltman, Duncan, and Holbek, 1973).

Administrative and Technical Innovations

In the present investigation, the sociotechnical systems framework will be used to clarify the differences between technical and administrative innovations. Most studies of organizational innovation usually include all innovations in one category. Innovations do vary, however, and each type of innovation has its own attributes that influence its rate of adoption. Studies of the differential impact of organizational factors on the adoption of different types of innovations have shown that the predictor variables for different types of innovations are not necessarily the same (Moch and Morse, 1977; Aiken, Bacharach, and French, 1980; Kimberly and Evanisko, 1981). Therefore, it is no longer adequate to aggregate all innovations into a single variable, because a study of one type might produce results different from those found in a study of another type (Daft and Becker, 1978).

Technical innovations, as distinguished from technological innovations, are not merely innovations resulting from the use of technology. They are defined as innovations that occur in the technical system of an organization and are directly related to the primary work activity of the organization. A technical innovation can be the implementation of an idea for a new product or a new service or the

introduction of new elements in an organization's production process or service operation. Technical innovations are perceived here as a means of changing and improving the performance of the technical system of an organization. Administrative innovations are defined as those that occur in the social system of an organization. The social system here refers to the relationships among people who interact to accomplish a particular goal or task (Cummings and Srivastva, 1977). It also includes those rules, roles, procedures, and structures that are related to the communication and exchange among people and between the environment and people (Cummings and Srivastva, 1977). An administrative innovation can be the implementation of a new way to recruit personnel, allocate resources, and structure tasks, authority, and rewards (see Chapter 7). It comprises innovations in organizational structure and in the management of people (Knight, 1967).

Organizational Lag Concept

The concept of organizational lag, or the "discrepancy in the rate at which new technical and administrative ideas are implemented in an organization" (see Chapter 7), was used to study the relationship between technical and administrative innovations and the possible impact of their rate of adoption on an organization's performance. Following Ogburn's (1922) hypothesis of "cultural lag," which pertains to the societal level rather than the organizational level of analysis, Evan (1966) advanced the analogous hypothesis that administrative innovations in organizations tend to lag behind technical innovations. Evan (1966) noted that while technical innovations could lag behind administrative innovations, they did so infrequently.

The rationale for Evan's hypothesis can be clarified by applying Rogers and Shoemaker's (1971: 138–157) hypothesized relationships between attributes of innovations and the rate of adoption of innovations to the organizational level of analysis. They suggested that four attributes of innovation—relative advantage, compatibility, trialability (or divisibility), and observability (or communicability)—were positively related to the rate of adoption of innovations, while another attribute, complexity, was negatively related to the adoption rate. Furthermore, technical innovations are more observable, have higher trialability, and are perceived to be relatively more advantageous than administrative innovations, while administrative innovations are perceived to be more complex to implement than technical innovations (Damanpour, 1983: 45–47).

The findings of empirical research have also supported Evan's hypothesis. Aiken, Bacharach, and French (1980) found that over a ten-year period the average number of technical innovations proposed in city governments was nearly three times the average number of administrative innovations. This was true for innovations proposed by both department heads (middle management) and department employees. Similarly, Daft (1978) reported that the average number of technical innovations adopted in high-, medium-, and low-innovation school districts was greater than the average number of administrative inno-

vations adopted in the same districts. We therefore formulate the following hypothesis:

Hypothesis 1: *The rate of adoption of technical innovations in organizations tends to be higher than the rate of adoption of administrative innovations.*

Organizational Lag and Performance

From a systems perspective, performance is the ability of an organization to cope with all four systemic processes (inputs, outputs, transformations, and feedback effects) relative to its goal-seeking behavior (see Chapter 22). A high-performing organization would accomplish its primary tasks efficiently and would carry out its organization-maintaining and organization-adapting functions effectively (Miles, 1980). The organization-adapting function requires that as the environment changes, the structure or processes of the organization undergo change to meet the new environmental conditions. Innovative organizations tend to do more. They not only adapt to the environmental change, but also use their resources and skills to create new environmental conditions, for example, by introducing new products or services. Innovations are a means of providing these internal or external changes and are, therefore, a means of maintaining or improving organizational performance.

A few empirical studies reported positive effects of innovation on performance. For example, Mansfield (1968) showed that innovators in the steel and petroleum industries grew more rapidly than other firms in those industries during the five to ten years after the innovation. Armour and Teece (1978) found that the adoption of a major administrative innovation (the multidivisional structure) in petroleum firms increased the rate of return on owners' equity. Mahoney and Weitzel (1969) suggested that innovation, along with productivity, planning, and reliability, appeared to be an independent criterion of organizational performance. No empirical research, however, has thus far been undertaken to test the differential impact of administrative and technical innovations on performance.

From a theoretical standpoint, the sociotechnical systems framework emphasizes the role of both technical and social systems operating jointly for the effective operation of an organization; and it is suggested that concentration on either the technical or the social system without due regard to the other would result in low organizational performance and growth (Herbst, 1974). The social and technical systems of an organization need to function in balance if the organization as a whole is to operate effectively.

The relationship between the social system and the technical system is not strictly a one-to-one relationship but rather a correlative one. Any change in the technical system of an organization sets certain constraints and requirements for the social system of an organization. The effectiveness of the total organizational system depends upon the adequacy with which the social system is able to cope with these requirements (Emery and Trist, 1960). For example, in libraries, a technical innovation such as replacing a card catalog system with a computer-

based cataloging system would require changes in the social system such as hiring new personnel (e.g., programmers, data entry clerks, etc.) and training the staff of the cataloging department in the use of computer terminals, as well as devising new procedures for cataloging library materials. If the social system is not prepared, it cannot adjust to the demands created by the technical system; therefore, the match between the two systems required for high performance of the organization will not be achieved, thus suggesting the following hypothesis:

Hypothesis 2: *The association between technical and administrative innovations tends to be stronger in high-performance organizations than in low-performance organizations.*

Innovations are adopted to improve performance or to eliminate a performance gap that might be caused by changes in the external environment such as fluctuations in the demand for the output of the organization (Downs, 1967). The organization can adapt to variations in the environment by adopting administrative and technical innovations to change the social or technical system (or both). For example, an environmental change in a community, such as an outflux of middle-class residents and an influx of minority residents, might first lower the demand for the output of public libraries, thus reducing the performance level (e.g., circulation) of those libraries. In response, libraries can augment their collection with new books and audiovisual materials that are compatible with the needs of the changing community. The impact of this technical innovation on performance can be increased by introducing an administrative innovation, such as recruiting librarians who are multilingual or ethnically and racially similar to the patrons. Thus, a balanced adoption of types of innovation would boost performance, even though there is not a one-to-one relationship between the adoption of technical and administrative innovations.

Since organizational performance is a direct function of the balance between the social and technical systems, it would be expected that if organizational lag reaches a threshold value, it would have a retarding effect on organizational performance. That is, although some degree of organizational lag might be tolerated at the outset without affecting performance, an organization cannot continue to change one system without introducing changes in the other system. We therefore advance the following hypothesis:

Hypothesis 3: *The degree of organizational lag is inversely related to organizational performance.*

Hypothesized Dynamics of Innovation

It is often said that organizations introduce technical changes, and then, out of necessity, proceed to make alterations in the social system; that is, the joint optimization of the social and technical systems is often reached by rearranging the social system around the technical system. For example, Passmore *et al.* (1982) reported that in only 16 percent of the 134 studies they reviewed was the technical system changed in order to support the desired social system. This par-

ticular order of introducing changes (Model A in Figure 8.1) might be due to the perception among managers, as well as among economists and organizational researchers, that technical innovations are more effective than administrative ones in helping organizations to respond to external changes and to improve their performance.

In the sociotechnical systems framework, changes in one system are generally assumed to be followed by appropriate changes in the other system. However, because the technical system is generated and controlled by the social system, changes in the social system might be assumed to have a stronger impact on the changes in the technical system, rather than vice versa. Moreover, changes in the social system might have a greater impact on the total system and prepare it for the introduction of suitable technical changes. This alternative and possibly more accurate model of the dynamics of innovation in organizations is suggested in Model B in Figure 8.1.

In the contingency theory of organization (Lawrence and Lorsch, 1967), changes in the environment necessitate changes in strategies. These changes

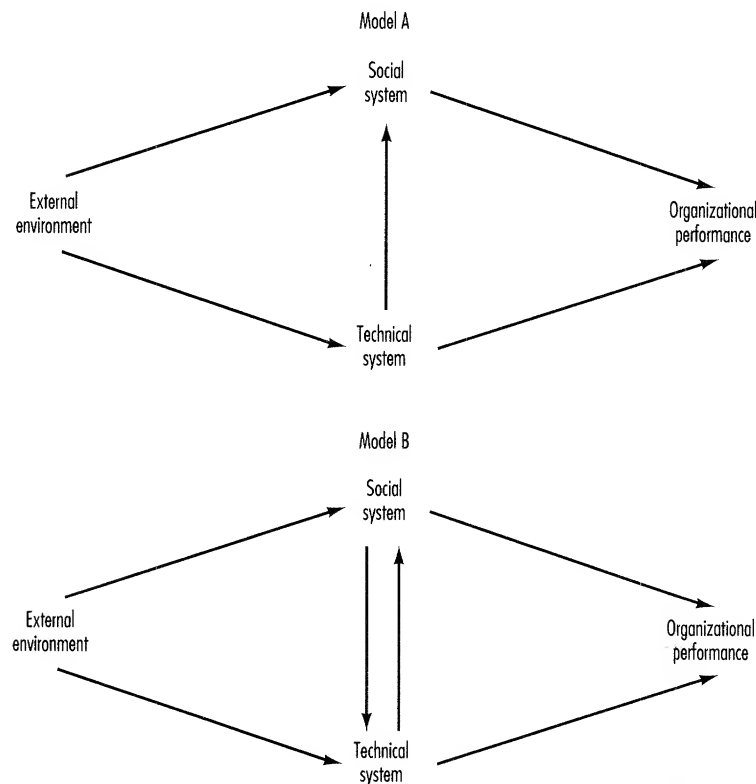


Figure 8.1 Alternative models of the relation of changes in the social and technical systems of organizations.

subsequently affect organizational form, which, in turn, influences organizational performance. Changes in organizational form affect various organizational systems, such as the social and technical systems, and a change in one system would produce a compensatory change in another system. A “fit” among systems would therefore be required for the effective operation of the organization (Galbraith and Nathanson, 1978). To influence performance positively, changes in the organizational systems therefore should be introduced so that the systems remain in balance and reinforce one another, as shown in Model B in Figure 8.1.

Support for Model B in Figure 8.1 can also be found by considering the role of administrative and technical cores in the process of innovation. It was hypothesized (see Chapter 7) and confirmed that administrative innovations tend to begin near the top of the hierarchy (i.e., the administrative core) and trickle down, while technical innovations tend to originate from among the professionals lower in the hierarchy (i.e., the technical core) and trickle up (Daft, 1978). The administrative core has as its domain the overall performance of the organization (Daft, 1978). Management, therefore, can provide conditions that enable members associated with the technical core to introduce innovations. For instance, the management of a library can introduce administrative innovations, such as new incentive schemes, continuing education of personnel, and employee participation in professional activities outside of the library, that might motivate and improve the ability of professional librarians to introduce innovations in the technical service functions (e.g., cataloging, circulation control, acquisition) of the library. Thus changes in the social system lead to changes in the technical system.

The sequence in which innovations are introduced in the social and technical systems of an organization can also be affected by the type of organization. Libraries are historically relatively stable in their technology. They are not normally the originator of innovations based on technology, but rather are the users of innovations that are originally developed in other industries. Library technical innovations, for instance, rather than being pioneered by libraries, are often provided by speciality suppliers who adapt innovative techniques and devices from other industries to the particular needs of the libraries’ market (Drake and Olsen, 1979). This external origin of most technical innovations may explain the precedence of administrative innovations over technical innovations. We therefore formulate the following hypothesis:

Hypothesis 4: *The adoption of administrative innovations tends to trigger the adoption of subsequent technical innovations more readily than the reverse.*

RESEARCH DESIGN

In the test of these hypotheses, organizational performance was the dependent variable, and the rate of adoption of technical innovations, the rate of adoption

of administrative innovations, and the degree of organizational lag were the independent variables.

Sample

The data for this study were derived from public libraries in six northeastern states. Only libraries serving a population of 50,000 or more were included in the survey. Smaller libraries were not considered, because it was assumed that many of the innovations in the questionnaire would not be applicable to them. Public libraries were selected for several reasons. First, a wide array of innovations had been introduced in public libraries since the 1970s. Second, for many public libraries during the 1970s, the level of funding was reduced and competition increased. Library managers were faced with the challenge of adopting new programs to improve, or at least maintain, the level of services. Since these conditions were expected to continue into the 1980s, a study of library innovations and their effect on library performance seemed timely. Finally, because archival information is more readily available from public libraries than from many private organizations, the burden of data collection for this longitudinal study was reduced.

Documentary data on library operations were collected from each Department of Public Libraries in the six states. In addition, a mail questionnaire was used to collect information on innovations from individual libraries during the summer of 1982. Of the 158 questionnaires mailed, 99 were returned, of which 85 were usable.²

Independent Variables

Two approaches for collecting innovation data were considered. One was to develop an inventory of all administrative and technical innovations in public libraries in the course of a preliminary study and ask each library director to identify those innovations that were implemented in his or her library in a given period. An alternative approach was to define a set of criteria for administrative and technical innovations in public libraries and ask librarians to record all innovations implemented in a specified period. In view of the broad nature of public library activities, the first approach was more suitable to this investigation. It provides for better control in determining innovation scores and, consequently, improves the validity of the findings. To ensure that all innovations adopted would be included, the questionnaire allowed respondents to add

² When the sample of nonrespondents was compared to that of respondents, it was found that 52 percent of small libraries, 49 percent of medium libraries, and 83 percent of large libraries returned usable questionnaires. Since small and medium libraries together constituted 88 percent of the usable returns, the samples of respondents and nonrespondents (in terms of library size) can be considered as not significantly different.

innovations that were adopted by their organization but that were not included in the prepared inventory.³

In studies of innovation, the measure of technical and administrative innovations is seldom based on a comprehensive list of innovations. Researchers usually focus on the innovations adopted in one part of the organization or on several major innovations. In this study, the measure of innovation was based on an extensive list of administrative and technical innovations that contained most, if not all, innovations in public libraries from 1970 to 1982. Obtaining data on the adoption of a large number of innovations provides a more valid profile of innovation adoption behavior, which is preferable to cases in which a less general pattern of adoption behavior is studied by selecting a limited number of innovations (Daft and Becker, 1978). Sixty-seven innovations, 40 technical and 27 administrative, were the subject of analysis.⁴

Innovations pertaining to technical service areas of a library such as acquisition, circulation control, cataloging, and reference services were considered as technical innovations. They comprise introducing a new system or equipment or providing a new service to patrons. Examples of technical innovations include automated acquisition or circulation control systems, books-by-mail service, on-line catalog, automated name authority files, formalized collection maintenance procedures, automated interlibrary loan service, the Kurzweil reader or the Optacon for the blind, video tape or video cassette materials, and electronic detection systems.

Administrative innovations were defined as those that affected the library's social system, therefore creating changes in its structure or processes. They comprise the introduction of a new management system, administrative process, or staff development program. Examples of administrative innovations are automated personnel records and skills systems, formalized strategic planning process, management by objectives, zero-based budgeting, staff continuing education programs, job rotation, flex-time, coordinating or consultative staff committees, and incentive or reward systems for the staff.

³ An analysis of the number of innovations added by the libraries showed that innovations were not uniformly distributed among libraries; some had added quite a few innovations, others hardly any. Moreover, there were few similarities among the innovations added by respondents (no single innovation was added by more than three libraries). It was therefore decided not to add innovations to our list of innovations printed on the questionnaire. Including the additional innovations in constructing the innovation score would have been unfair to those libraries that did not participate in reporting their additional innovations.

⁴ The list of innovations was developed through a literature search, as well as through a series of individual interviews and group meetings with librarians, library executives, and educators in five locations. Approximately 100 innovations were listed under eight functional categories in the questionnaire. After a preliminary analysis of the returned questionnaires, to preserve the integrity of the innovation scores for early adopters, it was decided to exclude those innovations that were either widely adopted before 1970 or terminated shortly thereafter. The criteria that determined exclusion were: (1) whether more libraries terminated than implemented the innovation in 1970–1982; and (2) whether more libraries implemented the innovation before 1970 than in 1970–1982.

To determine innovation scores, it was important to identify the periods in which the innovations were adopted by libraries. Since the focus of the study was on innovations adopted by libraries during the 1970s, two five-year periods (1970–1974 and 1975–1979) were selected, because they were long enough to manifest the potential impact of innovations on organizational performance and to reduce the effects of an exceptional year in computing measures of performance. Two additional periods, pre-1970 and post-1979 (1980–1982), were added to allow us to study the effects of early adoption versus late adoption.⁵ In this way, libraries could be identified that had implemented most of the innovations listed on the questionnaire and had proceeded to incorporate other innovations.

Measures of administrative and technical innovations. Two measures were selected for analysis: one, an absolute measure based on the number of innovations implemented in each library (technical and administrative innovations were counted separately), and the second, a relative measure that took into account the unequal number of administrative and technical innovations.⁶ The relative measure is the percentage of innovations adopted from the total innovations available for adoption during a specific period. For example, the relative score of technical innovations from 1975–1979 for library A would be the number of technical innovations that it adopted during 1975–1979, divided by the number of all technical innovations that were available but not adopted by library A during 1975–1979, multiplied by 100. A study of the relationship between the absolute and relative measures of innovation (for both administrative and technical innovations) revealed a high degree of association; the zero-order correlations in every period were greater than .95, and all correlations were significant at the .001 level (Damanpour, 1983: 113). Therefore, in studying the relationship between innovation and performance, one can use either of the two measures; however, in operationalizing the degree of organizational lag, the relative rather than absolute measure of innovation was used.

Measure of organizational lag. Organizational lag for a given period was measured by the (absolute) difference between the relative measures of technical and administrative innovations in that period.

⁵ The correlation between innovation scores (for both technical and administrative innovations) in one period with its preceding periods revealed that the choice of periods did not cause a reduction in the number of innovations that a library could adopt over a period relative to those innovations adopted in an earlier period (Damanpour, 1983: 139–141).

⁶ Innovations that were adopted and terminated during the same period were not included in the innovation score, on the assumption that those innovations would inflate the innovation score without having been in place an adequate number of years to influence library performance. The total number of technical innovations adopted and terminated in the same period by all libraries in the sample was 27; the total number of administrative innovations was 18, which corresponds to 2.32 percent of all technical innovations and 2.74 percent of all administrative innovations adopted by all libraries together.

Dependent Variable

The measurement of organizational performance, the dependent variable, is often a major problem in studies of organizations. There are a variety of problems in measuring performance (Spray, 1976; Goodman and Pennings, 1977a; Cameron and Whetten, 1983), and various models and evaluation criteria, such as the goal attainment model (Price, 1972a), the system resource model (Yuchtman and Seashore, 1967), the organizational process model (Steers, 1977), the multiple constituency model (Connolly, Conlon, and Deutsch, 1980), and the systems model (Chapter 22, this volume; Miles, 1980), have been suggested by organizational theorists and researchers. Due to the complexity of the construct, however, there is no generally accepted model or conclusive empirical evidence for a best single measure or single set of measures of performance. Consequently, several performance indicators were used that relate to different performance criteria.

A comparative and longitudinal study limits the number of performance measures that can be used, because of the problem of the availability and compatibility of data and the cost of data collection. In public libraries with a variety of services and constituents, it seemed reasonable to base the evaluation of performance on a set of measures that take into account the multidimensionality of performance.

Eleven performance indicators were used, and these were categorized under five types of measures (Table 8.1).⁷ Eight indicators (constituting objective measures) were based on data taken from annual statistical reports of public libraries published by the separate states. Despite criticism of the usefulness and accuracy of library statistics (Childers, 1975), these reports remain the major source for performance evaluation in a comparative or longitudinal approach. The remaining three indicators (constituting the subjective measure) were based on assessments made by the library directors of the performance of their libraries. An approach similar to the one used by Lawrence and Lorsch (1967: 261) was used to ask directors to rate their libraries' overall performance, extent of services, and quality of services against those of other public libraries of the same type and size. The subjective performance indicators, for which the data were collected via the mail questionnaire, were computed for the 1980–1982 period.

The objective performance indicators were computed for the 1975–1979 period.⁸ The ratios consisted of different variables with different units and mag-

⁷ An important variable, user's satisfaction, was not included in our list of performance measures. User's satisfaction is a comprehensive indicator that can only be measured by directly surveying users. It was beyond the resources available to this study to survey the users of the libraries in the sample. Furthermore, in constructing the efficiency measure, circulation was used as the sole indicator of output. A more comprehensive measure of output should include other variables, such as reference transactions, in-library materials use, and patrons' library visits. Because statistics published by the state libraries were the only source obtainable for all libraries in the sample, these other indicators of library output could not be included.

⁸ Later statistics were not available for all states, and statistics for the earlier years had many missing values. In addition, the data collection procedures for several variables were changed from 1970–1974 to 1975–1979.

Table 8.1 *Library Performance Measures*

Objective measures
Efficiency measure
Turnover rate: circulation/holdings
Circulation/total expenditures
Circulation/number of staff
Service measure
Number of staff/population served
Holdings/population served
Material expenditure/population served
Input measure
Library income/population served
Output measure
Circulation/population served
Subjective measure
Overall library performance
Extent of services
Quality of services

nitudes. To make them comparable for developing the composite measures of efficiency and service, each performance indicator was divided into four levels of a frequency distribution from the first to the fourth quartile). A four-point performance scale representing the four levels of the distribution was devised. The analysis showed that the three performance indicators of the efficiency measure, as well as the three performance indicators of the service measure, were highly intercorrelated (pairwise zero-order correlations for efficiency indicators were .64 or higher, and for service indicators were .60 or higher, with all correlations significant at the .001 level). The mean of each of these sets of performance indicators was therefore used to represent a composite measure of efficiency and service.

RESULTS

In the analysis of the organizational lag hypothesis (Hypothesis 1), we controlled for library size on the assumption that it influences the rate of adoption of innovations. Rockwood and Rockwood (1967) studied different aspects of size of public libraries and concluded that the budget was the best indicator of library size. Thus, the sample libraries were grouped into three budget categories: small (under \$700,000), medium (\$700,000 to \$3,499,999), and large (\$3,500,000 and more).

The organizational lag hypothesis was generally confirmed by the data (Table 8.2). Except for the large libraries in 1970–1974, the mean score of technical innovations was consistently higher than the mean score of adminis-

Table 8.2 *Adoption of Technical and Administrative Innovations in a Sample of Public Libraries*

<i>Innovation and Library Size</i>	<i>Score of Innovation (%)^a</i>			
	1970-1974	1975-1979	1980-1982	1970-1982
Technical				
Small (N = 37)	3.75	9.87	11.92	25.54
Medium (N = 38)	6.44	12.06	16.28	34.78
Large (N = 10)	8.33	22.24	22.87	53.44
Total (N = 85)	5.49	12.30	15.16	32.95
Administrative				
Small (N = 37)	2.11	7.88	9.59	19.58
Medium (N = 38)	5.47	11.32	9.33	26.12
Large (N = 10)	11.57	14.04	15.82	41.43
Total (N = 85)	4.73	10.14	10.21	25.08

^aBased on the relative measure of innovations averaged in each size category.

trative innovations in all periods and for all size categories. A test of significance of the difference between the means of total technical and administrative scores from 1970 to 1982 (a *t*-test for large libraries and *z*-tests for small, medium, and all libraries) indicated that for small and medium libraries, the difference was significant at the .05 level; for large libraries, although the difference was not statistically significant, it was in the hypothesized direction; and for all libraries combined, it was significant at the .01 level. The lack of statistical significance of the difference between means for the large libraries might well be due to the small sample size (*N* = 10).

Although no hypothesis was advanced about the relationship between size and innovation, it is evident from Table 8.2 that larger libraries adopted more technical and more administrative innovations than smaller libraries. The positive relationship between size and innovation has also been reported in other studies (Aiken and Hage, 1971; Baldrige and Burnham, 1975; Kim, 1980; Kimberly and Evanisko, 1981). This might be due to the greater degree of administrative complexity, larger number of professional librarians, or greater financial resources in large libraries, which would make the financial loss that might result from an unsuccessful innovation more tolerable.

The strength of the relationship between administrative and technical innovations for high-performance versus low-performance libraries (Hypothesis 2) was tested using both the objective measures of library performance of 1975-1979 derived from documentary data and the subjective measures for 1980-1982 based on evaluation of library performance by library directors (Table 8.3).⁹ For

⁹ The median score of each measure was used to divide the libraries into low-performance and high-performance groups. The differences in the number of libraries in the two groups for various measures are due to the missing values or the number of libraries in which the score is equal to the median.

Table 8.3 Relationship Between Administrative and Technical Innovations for High-Performance and Low-Performance Libraries Using Objective and Subjective Performance Measures

Performance Measure	Low-Performance		High-Performance	
	Number of Libraries	Zero-Order Correlation	Number of Libraries	Zero-Order Correlation
Objective				
Efficiency	41	.30*	42	.59***
Service	43	.49***	42	.23
Input	41	.33*	44	.44***
Output	39	.29*	44	.55***
Subjective				
Overall	59	.48***	25	.55**
Service ^a	47	.45***	37	.62***

* $p < .05$; ** $p < .005$; *** $p < .001$ ^aAn average of the scores on the extent and the quality of services.

all performance measures used, with the exception of the objective service measure, the data support the hypothesis.

The objective service measure was a composite measure of performance that was formed by combining three indicators (Table 8.1). It was assumed that the larger the value of this measure, the greater the number and the better the services to library patrons would be. The performance indicators used to construct this measure are all input values (population served is neither input nor output). This makes the objective service measure a weaker measure of performance than the efficiency measure, which is also a composite measure and for which the performance indicators are all output-input ratios.

The superiority of the efficiency measure to the service measure as an objective performance indicator can also be tested by statistical means. Objective library performance measures are composed of ratios that are not expected to change drastically from one period to another. Therefore, if the efficiency and service measures (which were constructed for the 1975–1979 period) were used as performance measures for finding the relationship between administrative and technical innovations during 1980–1982 (Table 8.4), the direction of the correlation between administrative and technical innovations for high-performance versus low-performance libraries should have remained the same as that of 1975–1979 (Table 8.3). Tables 8.3 and 8.4 show that the correlation between administrative and technical innovations for the efficiency measure was found to be lower for low-performance libraries than for high-performance libraries for both periods (.30 vs. .59 for 1975–1979, and .42 vs. .56 for 1980–1982), while the correlations for the service measure changed direction (.49 vs. .23 for 1975–1979, and .36 vs. .58 for 1980–1982).

Table 8.4 Relationship Between Administrative and Technical Innovations in 1980–1982, Using Performance Measures of 1975–1979

Performance Measure	Low-Performance		High-Performance	
	Number of Libraries	Zero-Order Correlation	Number of Libraries	Zero-Order Correlation
Efficiency	41	.42**	42	.56**
Service	43	.36*	42	.58***

*p < .01; **p < .005; ***p < .001

We therefore concluded that the efficiency measure was a more dependable measure than the service measure. Moreover, it was to be preferred to input and output performance measures, because as a composite measure it combined three performance indicators, whereas the input and output measures were based only on one indicator each. Consequently, the efficiency measure was used to analyze the relationship between performance and organizational lag.

In the test of Hypothesis 3, the zero-order correlation between the efficiency measure of performance and organizational lag for the 1975–1979 period was -1.7 , which was significant at the .06 level. A further test was conducted by separating high-performance and low-performance libraries, using the median of the efficiency measure as the divider. The mean of the degree of organizational lag was found to be greater in low-performance ($\bar{X} = 11.10$) than high-performance ($\bar{X} = 7.47$) libraries. A one-way analysis of variance showed that the difference between the means of organizational lag in the two performance groups had an F -value of 5.36, which was significant at the .05 level.¹⁰

Hypotheses 1, 2, and 3 were intraperiod hypotheses; the relationship between variables was examined within specific periods. Hypothesis 4, however, was a cross-period hypothesis; it was tested by comparing the association between the rate of adoption of technical and administrative innovations across three periods (Table 8.5). The association between administrative innovations in 1970–1974 and technical innovations in 1975–1979 is stronger than the association between technical innovations in 1970–1974 and administrative innovations in 1975–1979 (.316 versus .01); the finding was similar for the 1975–1979 and 1980–1982 periods as well (.382 vs. .001). These correlations suggest that the more administrative innovations were adopted in a

¹⁰ A test of three forms of relationship between organizational performance and organizational lag provided further evidence for Hypothesis 3. By using a regression model, the first-, second-, and third-degree polynomial equations of organizational performance and organizational lag were constructed and compared. It was found that the best model was the second-degree polynomial equation, which showed that an increase in organizational lag had no effect on performance at the outset but that as organizational lag reached beyond a threshold value, the negative effect on performance became discernible (Damanpour, 1983: 150–153).

Table 8.5 Zero-Order Correlations Between Administrative and Technical Innovations ($N = 85$)^a

Technical Innovations	Administrative Innovations		
	1970-1974	1975-1979	1980-1982
1970-1974	.417**	.01	
1975-1979	.316*	.373**	.001
1980-1982		.382**	.471**

* $p < .005$; ** $p < .001$ ^aAll innovations adopted, including those in the pre-1970 period, showed a correlation of .695**.

given period, the more technical innovations were likely to be adopted in the subsequent period. On the other hand, an increase in technical innovations adopted in one period did not make administrative innovations more likely in the following period. Inasmuch as Hypothesis 4 is confirmed, one may therefore conclude that changes in the social system of libraries are more likely to facilitate changes in the technical system of libraries than the reverse process.¹¹

This result, however, may be a function of the specific organizational characteristics of libraries and their market and technological environment. Public libraries have operated, until recently, under stable and noncompetitive conditions. The rate of change in their internal operational environment has been slow, partly due to the low technology of their operation. One would expect, therefore, that in such a traditional, low-technology organization, administrative innovations would precede technical innovations. On the other hand, in high-technology organizations, such as computer manufacturers, Hypothesis 4 might be reversed.

DISCUSSION

Organizations strive to maintain or improve their level of performance. To accomplish this goal, they introduce changes in their structure and processes. These changes can be the direct result of managerial choice (planned change) or can be imposed by external conditions. Regardless of the origin of forces inducing organizational change, innovations are a means of creating changes to ensure adaptive behavior.

Public libraries faced significant changes in their environment during the 1970s. Most were confronted with escalating costs and a reduced funding base.

¹¹ When the four objective performance measures in 1975-1979 and administrative and technical innovations in 1980-1982 were correlated to see which type of innovation was more responsive to performance, the only significant association found was between the efficiency measure of performance and administrative innovations (zero-order correlation .20, significant at the .05 level). That is, the higher efficiency in an earlier period would result in the adoption of more administrative innovations later. One might therefore conclude that for this organizational population, efficiency was more clearly linked to administrative than to technical innovations.

Competition from private institutions (e.g., book stores) grew. A shift in the age and ethnic mix of the population served by many libraries also influenced the demand for their services. Although these environmental changes reduced output and the availability of financial resources for many libraries, thus affecting their performance (e.g., circulation per expenditure), innovations in the publishing, communications, and computer industries have created new opportunities for public libraries by making it possible for them to introduce changes in their operating and management systems. As shown in Table 8.2, libraries introduced more innovations from 1970 to 1982, adopting, on the average, more technical than administrative innovations.¹² This finding is not unexpected, since technical innovations are often considered less complex to implement, are more visible, and are perceived to influence performance more readily than administrative innovations.

Studies of innovation to date have not explored the relationship between adoption of types of innovation. Innovations are typically viewed as having no influence on each other. Yet the adoption of innovations is not the only factor affecting an organization's ability to adapt and maintain its level of performance; a coordinated change in the social and technical systems could also be effective. For example, in response to international competition, some U.S. manufacturing organizations have improved their productivity, as well as the quality of their products, by introducing computer-controlled manufacturing processes and robots, along with employee involvement schemes such as labor-management quality teams and profit-sharing and stock-option plans. In short, it is the combination of related changes in the social and technical systems that help to maintain the level of performance in response to an environmental change. One type of change without the other would not be optimally effective.

The data support this generalization and show that high-performance libraries have a stronger association between the rate of introduction of innovations in their social and technical systems (Table 8.3). They further illustrate that the discrepancy in the rate of introducing changes in the two systems would affect performance negatively. Yet another interesting result is that the correlation between administrative and technical innovations is positive across both low-performance and high-performance organizations. Libraries that adopt more of one type of innovation also adopt more of the other type. This relationship supports our argument for balanced changes in the social and technical systems of organizations.

Although the importance of technical innovations cannot be underestimated, the impact of administrative innovations in preparing organizations for new technical changes is all too often underappreciated. For instance, from the perspective of institution building, an administrative innovation resulting in a new structural form is probably a more important innovation than a major technical innovation because it is essential to both effective organizational performance and institutional problem solving (Schulman, 1969). The intro-

¹² The rate of adoption had not leveled off in 1980–1982, because this was a two-and-a-half-year period, whereas the other two were five-year periods.

duction of administrative innovations, therefore, might have a greater impact in the long run on the overall performance than would the introduction of technical innovations.

Our data showed that the adoption of administrative innovations facilitates the adoption of technical innovations (Table 8.5). When administrative and technical innovations in two consecutive periods were correlated, it was found that more administrative innovations would result in more technical innovations later. Administrative innovations can change an organization's climate, communication, interdepartmental relations, personnel policies, and so on. In turn, they provide new opportunities for the initiation and adoption of innovations in the technical system.

CONCLUSION

Environmental change or uncertainty stimulates changes in the strategy and/or structure of an organization, which in turn lead to the implementation of innovations. A balanced implementation of administrative and technical innovations would help to maintain the equilibrium between the social and technical systems, which in turn would lead to high performance. On the other hand, a discrepancy in the rate of adoption of innovations in the social and technical systems would retard the rate of improvement of performance. If the observed relationship between organizational lag and performance proves to be true in other organizational populations, then organizational lag can be considered as an empirical measure of "fit" between innovations in the social and technical systems of an organization. Further research that examines the potential use of organizational lag as a measure of "fit" would be helpful.

The organizational lag model might also be applied in comparative studies of innovation among various types of organizations. For instance, it is often said that public (not-for-profit) organizations are less innovative than private (for-profit) organizations. To date, however, there is little empirical evidence to support this claim (Roessner, 1977). Clear differences exist between these two types of organizations, as reflected in their differing political influences, degree of market exposure, and public scrutiny, as well as in their internal structures and organizational processes. It is reasonable to expect that the relationships between organizational innovation and performance might also differ in public and private organizations. However, if, based on further research, organizational lag proves to be a reliable measure that differentiates between low-performance and high-performance organizations in various populations of organizations, then generalizations about rates of innovations being higher in private organizations than in public organizations may not be true. The ability of organizations to maintain a balance between their social and technical systems would determine their innovativeness as well as their level of performance. Clearly, systematic comparative research is required to explore these relationships in various organizational populations.

PART IV

INTERORGANIZATIONAL NETWORKS

1

2

Organization-Sets

Several of the theories of organizations reviewed in the Introduction to this book have sensitized organizational researchers to the importance of attending to organization-environment relationships (Emery and Trist, 1965; Lawrence and Lorsch, 1967; Aldrich, 1979). Systems theory has led researchers to conceptualize organization as open systems rather than as closed systems (Bertalanffy, 1951; Boulding, 1956; Katz and Kahn, 1966; Emery, 1969; Miller, 1972; Ackoff, 1974: 11–17). Resource dependence theory underscores the dependence of an organization on other organizations for essential resources (Pfeffer and Salancik, 1978). And organizational ecology, although concerned with a population of organizations rather than with individual organizations, identifies a populational context that affects the chances of organizational survival (Hannan and Freeman, 1989).

That organizations are embedded in unique environments has led researchers to conceptualize this embeddedness as networks, namely, as linkages with envioning organizations. Organizational networks, unlike individual organizations, need not necessarily be designed or evolve in accordance with the principles of organizational hierarchy.

In Chapter 9, an organization-set model is presented to capture the concept of the network linkage of an organization. Concepts such as the “focal organization” and the input and output “organization-sets” are introduced in order to relate a given organization or a class of organizations to envioning organizations. Several dimensions of organization-sets are defined that in turn are used in formulating a number of interrelated hypotheses. By mapping the network structure of an organization, one can ascertain its performance prospects and identify what network changes may improve the fortunes of the “focal organization.”

Social science research on organizations has been concerned principally with *intraorganizational* phenomena. Psychologists have studied the individual in an organization; social psychologists, the relations among the members of a group in an organization and the impact of a group on the attitudes and behavior of group members; and sociologists, informal groups, formal subunits, and structural attributes of an organization.¹ With relatively few exceptions social scientists engaged in organizational research have not taken the organization in its environment as a unit of observation and analysis. Selznick's (1949) work on the TVA is a notable exception, as are Ridgeway's (1957) study of manufacturer-dealer relationships, Dill's (1958) comparative study of two Norwegian firms, Levine and White's (1961) research on health and welfare agencies, Elling and Halebsky's (1961) study of hospitals, and Litwak and Hylton's (1962) study of community chests and social service exchanges.

The relative neglect of *interorganizational* relations is all the more surprising in view of the fact that all formal organizations are embedded in an environment of other organizations as well as in a complex of norms, values, and collectivities of the society at large. Inherent in the relationship between any formal organization and its environment is the fact that it is to some degree dependent upon its environment; in other words, it is a subsystem of the more inclusive social system of society. As distinct from a society, which in some respects is relatively self-sufficient in that it runs the gamut of all human institutions, a formal organization is a partial social system inasmuch as it defines only a specific set of goals and statuses as relevant to its functioning.

The phenomena and problems of interorganizational relations are part of the general class of boundary-relations problems confronting all types of social systems, including formal organizations. All such boundary relations tend to be enormously complex. Apart from sheer complexity, problems of interorganizational relations have been neglected by organizational analysts in part because of the concepts and propositions of various theories of organization. For example, the Weberian theory of bureaucracy is concerned largely with internal structural attributes and processes such as specialization of functions, allocation of authority, and formalization of rules. Taylorism (Taylor, 1947) and other kindred theories are also oriented toward internal relations among personnel. And the inducement-contribution theory of Barnard (1938) and Simon (1955) also has an intraorganizational focus. A notable exception to the intraorganizational focus is the theoretical work of Parsons (1959, 1960) on formal organizations. As a social system theorist, Parsons is concerned with how organizations differing in their primacy of functions solve four system problems: adaptation, goal attainment, pattern maintenance, and integration. Any attempt to investigate how a particular organization solves these problems immediately involves considerations of interorganizational relations.

Notwithstanding the general neglect of interorganizational phenomena by organization theorists, managers are greatly preoccupied with interorganizational

¹ See, for example, Argyris (1957, 1964). See also Blau (1955); Costello and Zalkind (1963); Bennis *et al.* (1964); Haire (1964); Kahn *et al.* (1964a); and Chapter 1, this volume.

relations. Some well-known examples of interorganizational practices are allocation of resources to public relations, cooptation of personnel of environing organizations into leadership positions in order to reduce the threat they might otherwise pose, acquisition of and merging with competitors, use of espionage against competitors, and recourse to litigation, arbitration, and mediation to resolve interorganizational disputes. These and many other interorganizational phenomena and processes await systematic inquiry by organization theorists. Millett's (1962: 3) general observation about organization theory is particularly relevant to this problem area: "our practice has far outrun our theory. . . . The art of organization has much more to its credit . . . than has the science of organization." Impeding progress are problems of conceptualizing and measuring interactions among organizations. Prevailing organizational concepts and theories concerned with intraorganizational phenomena are probably not adequate for a study of interorganizational phenomena.

The purpose of this chapter is to explore in a preliminary manner some conceptual and methodological problems of interorganizational relations. In the process we hope to extend the scope of organization theory and to draw attention to the potentialities of comparative research on interorganizational relations.

THE ROLE-SET

One point of departure in the study of interorganizational relations is to examine the utility of the concept of the "role-set," developed by Merton (1957a: 368–380), for analyzing role relationships (Gross, Mason, and McEachern, 1958). A role-set consists of the complex of roles and role relationships that the occupant of a given status has by virtue of occupying that status. A professor, for example, interacts not only with students but also with other professors, with the head of the department, with the dean of the school, and occasionally with the president or with the members of the board of trustees.

In all organizations, the occupants of some statuses perform a liaison function with other organizations. Top executives in industrial organizations frequently confer with government officials, with executives of other firms within and without the industry, with members of trade associations, and with officials in the local community. As guardians of the "public image" of the organization, they are probably wary of delegating to subordinates contacts with representatives of other organizations that might have critical significance for the welfare of their own organizations (Riley and Levy, 1963).

The difference in orientation and behavior between liaison and nonliaison personnel is clearly brought out in a study by Macaulay (1963). In a study of the use of contract law among business firms, Macaulay found a high incidence of noncontractual relations. Among his other findings was a difference in orientation among the various departments in business firms toward the use of contracts, with the sales department being more negatively disposed to contracts and the comptroller departments being more positively disposed. When

interdepartmental conflicts arise about the use of contracts, the house counsel, Macaulay observes, occasionally performs the function of an arbitrator.

A role-set analysis of sales personnel as compared with the personnel of comptroller departments suggests a possible explanation for the observed difference in attitudes toward the use of contracts (Evan, 1963b: 67–69). As the “foreign affairs” personnel of an organization, sales department employees come into recurrent contact with their “role partners” in other organizations, that is, purchasing agents, with the result that nonorganizational norms develop, making for less recourse to contracts. In contrast, the role-sets of comptroller personnel involve a higher degree of interaction with others within the organization, thus reinforcing organizational norms, including the use of contracts. We may infer from Macaulay’s study that systematic inquiry into the role-sets of boundary personnel will shed light on interorganizational relations as they bear on organizational decisions, whether pertaining to the use of contracts or other matters.

THE ORGANIZATION-SET

Analogous to the role-set concept is what I propose to call the “organization-set.” Instead of taking a particular status as the unit of analysis, as Merton does in his role-set analysis, I shall take as the unit of analysis an organization or a class of organizations and trace its interactions with the network of organizations in its environment, that is, with elements of its organization-set. In analyzing a particular organization-set, I shall refer to the organization that is the point of reference as the “focal organization” (Gross, Mason, and McEachern, 1958: 50–56). To avoid the danger of reifying interorganizational relations, the relations between the focal organization and its organization-set are conceived as mediated by (1) the role-sets of its boundary personnel; (2) the flow of information; (3) the flow of products or services; and (4) the flow of personnel. As in the case of the role-set, conflicting demands by members of the organization-set may be handled by the focal organization with the help of mechanisms analogous to those described by Merton (1957a: 371–379); for example, by preventing observation of behavior and by making concerted action to counter the demands of other organizations.

An analysis of the organization-set of a focal organization (or of a class of focal organizations) could help explain (1) the internal structure of the focal organization; (2) its degree of autonomy in decision making; (3) its degree of effectiveness or goal attainment; (4) its identity (i.e., its public image and self-image); (5) the flow of information from the focal organization to the elements of its organization-set and vice versa; (6) the flow of personnel from the focal organization to the elements of its organization-set and vice versa; and (7) the forces impelling the focal organization to cooperate or compete with elements of its organization-set, to coordinate its activities, to merge with other organizations, or to dissolve. As an example of the possible explanatory utility of the

organization-set concept, we shall presently consider the effects of structural variations in the organization-set on the decision-making autonomy of the focal organization.

SOME DIMENSIONS OF ORGANIZATION-SETS

If we are to make any progress in analyzing interorganizational relations, we shall have to identify strategic attributes or dimensions of organization-sets. With the aid of such attributes, we can formulate empirically testable propositions about interactions among organizations.

A provisional listing of dimensions of organization-sets follows; its principal value may lie in illustrating a possibly useful direction of conceptual analysis. Whether these dimensions are more heuristic than others that might be formulated can be determined only by empirical research.

1. *Input versus output organization-sets*: The focal organization's environment consists of an input and an output organization-set. As a partial social system, a focal organization depends on input organizations for various types of resources: personnel, matériel, capital, legality, and legitimacy (Evan and Schwartz, 1964). The focal organization in turn produces a product or a service for a market, an audience, a client system, and so on. For example, a private hospital may have in its input organization-set the community chest from which it obtains financial support, an association of hospitals from which it receives accreditation, and the department of public health of the local or state government from which it receives one or more licenses granting it the right to function. Its output organization-set may include other hospitals with which it cooperates or competes, medical research organizations, government agencies to which it sends data, and the like.

2. *Comparative versus normative reference organizations*: As in the case of an individual, the focal organization may evaluate its performance by using one or more organizations in its set—input or output, more likely the latter—as a standard for comparison, that is, as a “comparative reference organization.” On the other hand, if a focal organization incorporates the values and goals of one or more of the elements of its organization-sets, we would refer to it as a “normative reference organization” (Merton, 1957a: 283–284). For example, a firm manufacturing a particular kind of bomber might compare the quality of its product with other firms manufacturing bombers. Such outside firms would then be deemed “comparative reference organizations.” Suppose, however, that the Department of Defense indicates that the rapid production of a newly developed unmanned decoy bomber is urgently required by the United States. If the firm decided to convert its current bomber production into the production of an unmanned decoy bomber, it will have in effect incorporated as its goal the goal of the government and would be using a representative of the government, the Department of Defense, as a “normative reference organization.”

3. *Size of the organization-set*: A focal organization may have a relatively large or a relatively small number of elements in its set. Whether it interacts with few or with many organizations presumably has significant consequences for its internal structure and decision making. The size of the organization-set is to be distinguished, of course, from the size of the focal organization, although the two are presumably correlated.

4. *Concentration of input organizational resources*: The focal organization may depend on few or many elements in its input organization-set for its resources. Whether the concentration of input organizational resources is high or low would probably affect the structure and functioning of the focal organization.

5. *Overlap in membership*: Not infrequently there is an overlap in membership of the focal organization with one of the organizations in its set. This is manifestly the case with (1) employees of an industrial organization who belong to a trade union with which the focal organization has a collective bargaining agreement; (2) scientists or engineers who are affiliated with a professional society from or through which an employing organization recruits its employees; and (3) members of the board of directors of the focal organization who are also directors of organizations in its set.

6. *Overlap in goals and values*: The goals and values of the focal organization may overlap with those of the elements in its set. To the extent that this occurs, it probably affects the nature of the interorganizational relations that develop. For example, hostility might be engendered between an American military base overseas and a political party in the country in which the base was situated if the party did not share the assessment that the base was performing a protective and deterrent function rather than an offensive and provocative function.

7. *Boundary personnel*: Classifying the personnel of an organization into those concerned principally with domestic matters and those preoccupied with "foreign affairs" is difficult, although not impossible (Thompson, 1962). In a study of four manufacturing organizations, Haire (1959) analyzes the growth of external personnel in relation to internal personnel. Parsons (1959: 10–16; 1960: 59–96) distinguishes among three levels of personnel and functions in a formal organization: institutional, managerial, and technical. The first and third categories probably involve a higher proportion of boundary personnel than the second category. In other words, top executives and some staff specialists such as those in sales, public relations, and house counsel are more likely to be engaged in boundary-maintenance functions than are junior and middle executives.

SOME HYPOTHESES ABOUT ORGANIZATION-SETS

Whether or not our preliminary consideration of some conceptual problems of interorganizational relations will prove useful only empirical research can establish. In the interest of stimulating inquiry in this relatively neglected area, several hypotheses on organization-sets, each assuming a *ceteris paribus* condition, will be formulated with the aid of the attributes enumerated in the foregoing section.

1. *The higher the concentration of input organizational resources, the lower the degree of autonomy in decision making of the focal organization.* A case in point is the difference in degree of independence between a public and a private university. A public university probably has fewer sources of revenue than a private university, and one member in its organization-set, the state legislature, probably accounts for the greatest part of its revenue. Consequently, public universities with a high concentration of input organizational resources probably exercise a lower degree of decision-making autonomy than private universities with a low concentration of input organization resources.

2. *The greater the size of the organization-set, the lower the decision-making autonomy of the focal organization, provided that some elements in the set form an uncooperative coalition that controls resources essential to the functioning of the focal organization, or provided that an uncooperative single member of the set controls such resources.* Where there is a high degree of conflict among the elements of the organization-set, such conflict may tend to cancel out their effect on the focal organization, thus affording it more autonomy than would otherwise be the case. On the other hand, to the extent that there are coalition formations and that these coalition formations provide essential resources for or services to the focal organization, this does impose significant constraints on the degree of independence of the focal organization.

A striking example of a coalition formation against a focal organization is the boycott by druggists—organized by their trade association—of the Pepsodent Company when the latter withdrew its California fair-trade contracts (Palamountain, 1955: 235–239). Also impressive is the action of the National Automobile Dealers Association in the courts and in legislatures to curb the power of the three large automobile manufacturers to dictate the terms of contracts and to cancel contracts (Palamountain, 1955: 107–158; Evan 1962b). By means of concerted action, this trade association has become a countervailing power in the automobile industry. But the size of an organization-set, through an alternative sequence of variations, may produce an increase in the decision-making autonomy of the focal organization as well as the decrease hypothesized above. Quite likely there is a positive association between the size of the organization-set and the size of the focal organization. The larger the organization, the greater the specialization in liaison functions, the number of boundary personnel, and so the decision-making autonomy of the focal organization. However, some qualifications are necessary. To the extent that the proportion of boundary personnel is indicative of the *actual* rather than the *attempted* impact on the elements of its set, the greater the proportion of such personnel in the focal organization—relative to the proportion of such personnel in the set—the greater is its decision-making autonomy. Thus it may be seen that different mediators of the effects of the size of an organization-set yield opposite consequences for the decision-making autonomy of the focal organization.

3. *The greater the degree of similarity of goals and functions between the organization-set and the focal organization, the greater the amount of competition between them, and hence the lower the degree of decision-making autonomy*

of the focal organization. In their study of health and welfare agencies, Levine and White (1961: 598) observe that

intense competition may occur occasionally between two agencies offering the same services, especially when other agencies have no specific criteria for referring patients to one rather than the other. If both services are operating near capacity, competition between the two tends to be less keen, the choice being governed by the availability of service. If the services are being operated at less than capacity, competition and conflict often occur. Personnel of referring agencies in this case frequently deplore the "duplication of services" in the community.

Another illustration of this hypothesis is the enactment of a law by Congress in 1959 requiring legislative authorization of major weapons programs of the armed forces. The enactment, Section 412 of the Military Construction Authorization Act of Fiscal 1960, substantially affects the process of policy making in military affairs. Previously, major weapons procurement was authorized on a continual basis. Section 412, however, required that procurement of aircraft, missiles, and ships by all the services would require renewed authorization on an annual basis. Section 412 was authorized by the Senate Armed Services Committee, which was seeking to expand Congress's participation in defense policy making. Here it may be seen that the common goal of the Department of Defense and of the Armed Services Committee was the adequate defense of the nation, and that efforts to achieve that goal brought them into conflict, lowering the decision-making autonomy of the Department of Defense (Dawson, 1962).

4. *The greater the overlap in membership between the focal organization and the elements of its set, the lower its degree of decision-making autonomy.* A case in point is the overlapping membership of industrial organizations and trade unions. Overlapping membership, if accompanied by overlapping goals and values, may engender a conflict of loyalties that in turn probably diminishes the autonomy of the focal organization.

In Africa trade unions have become closely associated with nationalist parties, which have almost invariably provided governments of newly independent states with important personnel. Overlapping membership then occurs between a ministry of the central government and a trade union. These union leaders then face a dilemma in the concurrent needs to meet their members' demands for higher living standards and to cooperate with the government in promoting economic development. Their decision-making autonomy is thus reduced relative to the autonomy present when they were only union officials.

5. *Normative reference organizations have a greater constraining effect on the decisions of the focal organization than do comparative reference organizations.* The relations between trade unions of federal civil servants and the government illustrate this hypothesis. In the American public service, it has been traditional not to strike; instead, public servants have been satisfied to have working conditions determined by legislation or unilateral administrative action. This is probably due in large measure to the fact that the government

department for which the civil servant works constitutes a very strong normative reference organization. Civil servants have apparently incorporated the goals of government, one of which is to maintain the continuity of the government in all circumstances. A trade union of office workers outside the government that threatens to strike will be seen only as a comparative reference organization whose members perform parallel duties with government workers. In the case of the civil servant, a normative reference organization clearly determines behavior to a greater extent than a comparative reference organization (Spero, 1962).

The foregoing hypotheses are but illustrations of the kinds that might be formulated with the help of the properties of organization-sets. These hypotheses revolve around the dependent variable of autonomy in the decision making of the focal organization. Clearly, similar hypotheses are needed for various interorganizational processes, for example, coordination, cooperation, competition, conflict, innovation, and amalgamation (Thompson and McEwen, 1958). Several examples of such hypotheses will be briefly considered:

1. *The greater the size of the organization-set, the greater the degree of centralization of authority in order to prevent the "displacement of goals" generated by subunit loyalties and actions (Merton, 1957a: 199-201). In turn, an increase in the centralization of authority results in an increase in the formalization of rules within the focal organization as a means of guarding against the displacement of goals.*

2. *The greater the similarity of functions between the focal organization and the members of its set, the greater the likelihood that it will compete with them. Overlapping membership, however, probably tends to mitigate competition. If overlapping membership is combined with overlapping goals and values, cooperative action that could lead to amalgamation might ensue.*

3. *The greater the complementarity of functions between the focal organization and the members of its set, the greater the likelihood of cooperative action.*

4. *The greater the capacity of the focal organization to invoke sanctions against the members of its set, the greater the likelihood of coordination and cooperation, provided that members of the set do not succeed in uniting in opposition to the focal organization.*

5. *The greater the shortage of input resources on the part of the focal organization, the greater the likelihood that it will cooperate with the input organizations in its set and the more favorable its disposition toward amalgamation with one or more of them. The academic "common market" or consortium formed among Midwest universities to pool their resources in graduate education is a case in point.*

6. *The greater the competition between the focal organization and the members of the output organizations in its set, the more favorable its disposition toward amalgamation, provided that the goals and values of the respective organizations are compatible.*

7. *If the members of the organization-set exhibit a high rate of technological change, the focal organization, in order to remain competitive, will be highly receptive to innovations.*

SOME METHODOLOGICAL PROBLEMS

Apart from the conceptual problems awaiting analysis in this area of research, there are measurement problems of considerable difficulty. Describing and measuring networks of interorganizational relations presents a substantial methodological challenge. Some gross behavioral indicators of interorganizational relations are number of contracts, number of clients or customers, volume of sales or services, volume of telephone calls made and received, and volume of mail sent and received. Mapping interactions of organizations would require special attention to boundary personnel, as noted above, and to the patterns of interaction of organizational decision makers. Such mapping operations of the behavior of boundary personnel and decision makers could also yield sociometric data on which of the elements in an organization-set are perceived by different categories of members of the focal organization as comparative reference organizations and which as normative reference organizations. Two closely related methodological tools that may prove useful in the mapping of interorganizational relations are graph theory and input-output analysis.

Graph Theory

One possible use of graph theory is in the construction of an index measuring the amount of decision-making autonomy of a focal organization or of any of the elements in its set (Harary and Norman, 1953; Cartwright, 1959; Flament, 1963). Let us consider three highly simplified organization-set configurations approximating a "wheel," an "all-channel network," and a "chain" (Bavelas, 1951; Leavitt, 1964). In the three digraphs shown in Figure 9.1, each point represents an organization, each line a type of interaction (a flow of information, of goods, of influence, or of personnel), and an arrow the direction of interaction.

If we take A as the focal organization in the three configurations, how do they differ in their degree of decision-making autonomy? Intuitively, we would expect that I_A ranks first in autonomy, that II_A ranks second, and that III_A ranks third. In the automobile industry, the supplier-manufacturer-dealer sequence of organizational relationships would suggest that the supplier is in a position comparable to III_A and that the manufacturers are in a position comparable to I_A (Ridgeway, 1957). Can we construct an index that would yield a "co-efficient of interconnectedness" of elements in an organization-set—and hence decision-making autonomy—that would discriminate not only among the three simplified organization-sets shown in Figure 9.1 but also among other possible configurations?

Input-Output Analysis

One input-output model that may prove useful in the study of interorganizational relations is that developed by Leontief *et al.* (1953). In the study of the structure of the American economy, Leontief and his associates have, of course, concerned themselves with economic parameters such as prices, investments,

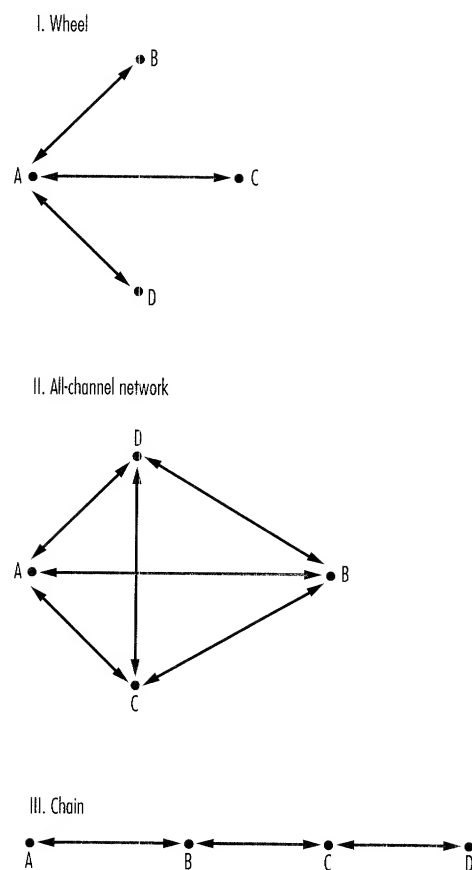


Figure 9.1 Three organization-set configurations.

and incomes. Is this mode of analysis applicable to noneconomic parameters of interorganizational relationships with which sociologists, social psychologists, and political scientists are concerned? Are the obstacles to an input-output analysis of interorganizational relations insuperable because the data most organizational researchers work with do not take the form of ratio scales, as is true of the data of economists? In most cases, the data used by social scientists studying organizations—other than economists—frequently take the form of nominal or ordinal scales and, occasionally, interval scales of, for example, flows of information, personnel, or influence. Apart from the level of measurement, do noneconomic data permit the construction of “technical coefficients” of inputs to the outputs of the focal organizations?

One way of raising the question of the applicability of input-output analysis is to consider a highly simplified relationship between the members of an oligopolistic industry, such as automobile manufacturing. In Figure 9.2 we present a hypothetical input-output matrix consisting of the flow of influence on management decisions regarding the styling of new automobiles. It would

		Number of praiseworthy mentions received by				
		AM	Ford	Chrysler	GM	Total
Number of praiseworthy mentions made by	AM		10	5	15	30
	Ford	2		5	15	22
	Chrysler	3	8		13	24
	GM	0	4	6		10
	Total	5	22	16	43	

Figure 9.2 Hypothetical matrix of flow of influence on styling decisions in the automobile industry (as indexed by frequency of praiseworthy mentions in the minutes of management meetings).

appear from the hypothetical data in Figure 9.2 that General Motors (GM) is the style leader. It receives the largest number of praiseworthy mentions in the minutes of management meetings of its competitors, and it in turn makes the fewest praiseworthy mentions in its meetings of its competitors' styles. Would an input-out analysis of matrices of the type shown in Figure 9.2—possibly in conjunction with additional data, such as share of the market—suggest any further operations for analyzing the data or yield any additional insights into the decision-making process concerning automobile styles?

An analogous matrix that might lend itself to an input-output analysis is shown in Figure 9.3. Once again it is clear from the hypothetical data that General Motors enjoys a commanding position: it has the smallest outflux of engineering personnel and the largest influx from the other automobile companies. Would an input-output analysis of this matrix, supplemented by data on other characteristics of the organizations, contribute to our understanding of the data?

The matrices shown in Figures 9.2 and 9.3 involve one point in time. Assuming that data are available for two or more time periods, can we apply a Markov chain model to analyze the processes of change in interorganizational relations?

CONCLUSION

The foregoing methodological discussion together with the theoretical analysis may provide guidelines for new research on interorganizational relations. Of particular promise is comparative research on the organization-sets of different classes of organizations. How different are the organization-sets of economic, political, religious, educational, and cultural organizations? And what are the consequences of variations in organization-sets for the internal structure and for the decision-making process of different types of organizations? Do “coercive” organizations have a network of interactions with other organizations different from “utilitarian” and “normative” organizations (Etzioni: 1961)? How different

		Flow of engineering personnel to				
		AM	Ford	Chrysler	GM	Total
Flow of engineering personnel from	AM		15	5	40	60
	Ford	5		5	25	35
	Chrysler	7	8		35	50
	GM	2	12	6		20
	Total	14	35	16	100	

Figure 9.3 Hypothetical flow of engineering personnel, 1985–1990.

are the organization-sets of habit, problem-solving, indoctrination, and service types of organizations (Bennis, 1959)?

Within the confines of any one class of organizations, how different are the organization-sets of, say, industrial organizations classified by industry? Similarly, what structural variations in organization-sets are observable among therapeutic versus custodial prisons or among hospitals differing in the importance they attach to the goals of treatment, teaching, and research (Cloward *et al.*, 1960; Wheeler, 1961)?

Another possible use of organization-set analysis is in the study of intraorganizational dynamics. If each of the major functional areas in a business organization—production, sales, engineering, personnel, and so on—is taken as a unit of inquiry, an organization-set analysis would be applicable in studying interdepartmental relations. Such an approach would probably be especially useful in investigating the problem of innovation in industrial organizations (see Chapters 7 and 8).

As is generally recognized, a formal organization is a particular type of social system. The study of interorganizational relations hence involves an analysis of intersocial system relations. Systematic inquiry into the interactions among various types of organizations may not only unearth new intraorganizational phenomena and processes, but may also provide the wherewithal for bridging the gap between the microscopic *organizational* and the macroscopic *institutional* levels of analysis. The solution of intersystem problems of the most aggregate level, namely, interrelations among societies, presupposes a knowledge of the nature of interorganizational interactions within and between the several institutions of a society.

An Organization-Set Model of Organizations

In Chapter 10, which I wrote as a supplement to Chapter 9, I explicitly reformulate the organization-set model in systems-theoretic terms. Additional dimensions of organization-sets are defined to facilitate an analysis of interorganizational systems. An illustrative application of the organization-set model is then presented in an effort to explain the regulatory impact of four federal administrative agencies: the Securities and Exchange Commission, the Interstate Commerce Commission, the Food and Drug Administration, and the Federal Trade Commission.

Clearly, the study of interorganizational relations, which has grown rapidly in the past few years, is still high on the research agenda of organization theory (Evan, 1976b; Aldrich, 1979; Meyer and Scott, 1983). With the further elaboration and refinement of organization theory, we can expect substantial progress in the study of interorganizational networks.

Until the late 1970s and early 1980s, the pattern of research in organization theory tended to be the reverse of that in behavioristic psychology. Instead of looking at the stimulus and response, social scientists, with the exception of some economists, have studied what behaviorists refer to as the "black box," that is, the internal structures and processes of an organization (Phillips, 1960; Williamson, 1965a). This strategy is justified in view of the complexity and variability of formal organizations, but it is a highly restricted approach to the analysis of organizational phenomena that consist of many external as well as internal interactions. It has nevertheless provided an indispensable prologue to the analysis of the problems of interorganizational relations that some social scientists and practitioners are now attempting to study.¹

The purpose of this chapter is twofold: (1) to outline a mode of interorganizational relations; and (2) to apply the model to some case materials on the interrelation of business and government organizations.

A SYSTEMS MODEL

For several decades, social scientists engaged in research on organizations have conceived of formal organizations as social systems. However, they have rarely pursued the implication of this conceptualization, which is to acknowledge that a systems analysis is required to guide the conduct of research. A systems approach to organizational phenomena begins with the postulate that organizations are open systems that, of necessity, engage in various modes of exchange with their environment (Katz and Kahn, 1966).

In further postulating the interrelationships of components of a given system, a systems approach identifies input elements, process elements, output elements, and feedback effects. Moreover, it focuses attention on the interrelation of at least three levels of analysis: the subsystem of an organization, the organizational system in its entirety, and the suprasystem. Analyzing the subsystems of an organization entails a study of the interaction patterns of various subunits. Analyzing the organizational system includes an examination of (1) the cultural components, that is, its values and goals; (2) the structural components, which consist of the various relationships among the subunits; and (3) the technological components. The suprasystem level of analysis of an organization necessitates at the very least an inquiry into the network of interactions or linkages of a given organization with various organizations in its environment.

The particular systems model of interorganizational relations explored here is one I have elsewhere referred to as an organization-set model (see Chapter 9). The points of departure of this model are several concepts in role theory developed by Merton and Gross, (1957a: 368–380) and Mason and McEachern (1958). Instead of selecting a status as the unit of analysis and charting the complex of

¹ Cf. Ch. 9; Litwak and Hylton (1962: 397–420); Emery and Trist (1965); Brown (1966); Clark (1966); Warren (1967); Evan (1968); and Litwak and Rothman (1970).

role relationships in which the status occupant is involved, as Merton does in his analysis of role-sets, let us take as the unit of analysis an organization or a class of organizations and trace its interactions with the various organizations in its environment, namely, its organization-set. Following Gross, Mason, and McEachern's (1958: 50–56) use of the term “focal position” in their analysis of roles, the organization of class or organizations that is the point of reference is referred to as the “focal organization” (see Chapter 9). As in the case of role-set analysis, the focal organization interacts with a complement of organizations in its environment, that is, its organization-set. A systems analysis perspective, however, suggests that we partition the organization-set into an input organization-set and an output organization-set. By an input organization-set, I mean a complement of organizations that provides resources to the focal organization; by an output organization-set, I mean all organizations that receive the goods and/or services, including organizational decisions, generated by the focal organization. Furthermore, a systems analysis requires that we trace feedback effects from the output organization-set to the focal organization and thence to the input organization-set, or directly from the output to the input organization-set. These feedback effects can, of course, be positive or negative, as well as anticipated or unanticipated, but it is easier to postulate these effects than to operationalize them to facilitate empirical inquiry.

The four components of the model—focal organization, input organization-set, output organization-set, and feedback effects—may be jointly conceived as forming an “interorganizational system.” Figure 10.1 summarizes the structural elements of this model of interorganizational relations.

If we take the Ford Motor Company as a focal organization for purposes of illustration, the input organization-set may include a variety of suppliers of raw materials, trade unions, government agencies, courts, universities, and research and development organizations. The input resources are very heterogeneous, including human, material, financial, legal, and other resources. These inputs are transformed by the focal organization's social structure and technology into products and services that are exported to the members of the

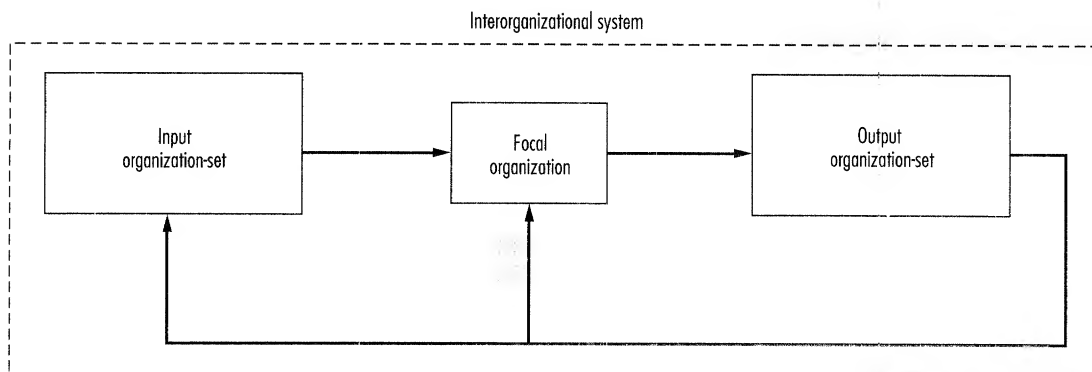


Figure 10.1 Some elements of an organization-set model of interorganizational relations.

output organization-set, which include principally automobile dealers. The output organization-set may also include advertising agencies concerned with increasing the sale of its products, trade associations to which information is provided and which may undertake to influence the course of future legislation, community chest organizations to which financial contributions are made, and others. The success with which the focal organization, in this case the Ford Motor Company, manages its multifaceted relations with the members of its output organization-set in turn has feedback effects on itself as well as on the input organization-set, which again triggers the cycle of interorganizational systemic relations.

If instead of the Ford Motor Company we take as a focal organization all four major automobile manufacturers for the purpose of studying how they "negotiate their environment," the analysis would focus on the "interfirm organization" in a simple oligopolistic market and the members of the output organization-set (Phillips, 1960; Cyert and March, 1963: 119–120). Such questions as the following might be asked: How does the focal organization decide on output, prices, policies with respect to automobile dealers, strategy with respect to trade associations, legislatures, and so on? In other words, given the problem formulation, it may not be especially relevant to inquire about the interactions of the focal organization with members of its input organization-set. If the analysis of this particular focal organization were extended to the members of the input organization-set, two potential members would be the Department of Justice and the Federal Trade Commission, one or both of which might inquire into possible violations of antitrust law.

DIMENSIONS OF ORGANIZATION-SETS

It should be clear from the context of this analysis that the phrase "member of an organization-set" refers to an organizational entity with which a focal organization interacts, not an individual member of one of the envioning organizations. Apart from distinguishing between input and output organization-sets, various other dimensions of organization-sets need to be explored if we are to generate some propositions about interorganizational interactions. For present purposes, three dimensions may be singled out that, *prima facie*, have significant consequences for the focal organization, namely, the size and diversity of the input and output organization-sets, and the network configuration.² The size of the set, of course, refers to the sheer number of input and output organizations with which the focal organization interacts; by diversity of the input and output organization-set is meant the number of organizations in the input and output sets differing in gross, manifest functions such as industrial organizations, courts, legislatures, community organizations, prisons, professional associations, hospitals, and so forth. The network configuration refers to the formal properties

² For other dimensions of organization-sets, see Chapter 9.

of interaction among the members of the input and output organization-sets. At least four types of interaction configurations that have loomed large in the experimental literature on group communication network experiments will be mentioned: (1) a *dyad*, in which focal organization A interacts with B, an individual organization or a class of organizations, in either the input or output set; (2) a *wheel network*, in which the focal organization interacts with more than one organization of a particular type but where there are no mutual interactions among the members of the set; (3) an *all-channel network*, in which all members of the set interact with one another and each interacts with the focal organization; and (4) a *chain network*, in which the members of a set are linked in series with the focal organization, which has only direct interaction with the first link, so to speak, in the chain.

Examples of network configurations from the real world might make these four types appear more plausible. An illustration of a dyadic relationship is the interaction of a trade union with a business organization. A wheel-type configuration would describe the interaction of automobile manufacturers with 30,000 to 40,000 individual automobile dealers prior to the formation of the National Automobile Dealers Association (Macaulay, 1965; Assael, 1969). With the establishment of this association, the interaction configuration was transformed to a modified channel network, thus increasing the relative bargaining power of the automobile dealers. The chain configuration commonly occurs in manufacturing and in distribution processes, as seen in the sequential pattern of interaction of automobile suppliers, automobile manufacturers, and automobile dealers. Obviously, these four network configurations are meant to be only illustrative of the formal properties of input and output organization-sets. Other types may be postulated, such as a limited-channel network with only one link to the focal organization. An exploration of the empirically observable formal properties of sets is but one of the many unsolved analytical problems of interorganizational relations.

An analysis of the formal properties of organization-sets points to an intriguing question concerning the relationship between these formal properties and modes of interaction between the focal organization and members of the input and output-sets. Thus, for example, under what conditions in a dyadic linkage between the focal organization and a member of its input set will we observe evidence of cooptation, bargaining, and amalgamation? In a wheel-type configuration, do we find the focal organization dominating the members of the set? If so, under what conditions will pressures emerge to transform the dominance-submission relationship into a bargaining relationship? In an all-channel network or a limited-channel network, would we find a tendency for a coalition to emerge vis-à-vis the focal organization? And, finally, under what conditions in a chain network would we find both cooperation and conflict because of the pressures arising from the constrained pattern of interdependence? Inasmuch as the focal organization will often be involved in diverse network configurations with members of its input and output sets, the question arises as to the relative frequency of different modes of interaction, given the frequency of different network configurations.

Apart from having consequences for modes of interaction between the focal organization and members of its input and output sets, each of the formal properties probably has some reverberations in the internal structure and internal processes of the focal organizations, such as in the formation of new subunits and new organizational norms, and the articulation of new goals. One hypothetical example will suffice: A state university whose principal source of financial support is derived from the state legislature is an illustration of a dyadic linkage between the focal organization and a member of the input organization-set. In this familiar situation, it is difficult to justify substantial budget increases over time for various departments and schools of a university unless new functional units are established. As a consequence, financial constraints encourage subunit differentiation in the focal organization; for example, sociology and anthropology are divided into separate departments; similarly, operations research and statistics, finance and economics, and the like are divided. By establishing new organizational subunits, which may increase student enrollment, it becomes easier to justify substantial increases in the budget of the total university as well as of its components.

ROLE-SETS OF BOUNDARY PERSONNEL

An analysis of modes of interaction between the focal organization and members of its organization-sets, with the aid of the three dimensions discussed above, has one serious limitation. On this level of aggregation there is not only a danger of hypostatizing organizations, that is, treating them as disembodied entities, but also of losing sight of the intervening mechanisms that contribute to the various modes of interaction. It is therefore essential to descend to a lower level of aggregation of social structure and examine the system linkages observable in the role-set relations of boundary personnel. It is through the behavior of incumbents of various statuses at the boundary of the focal organization, such as top executives, house counsel, purchasing agents, marketing specialists, personnel officers, and others that various environmental interactions are mediated. Corresponding to the distinction between an input and output organization-set, let us distinguish between input and output boundary roles. As a result of the network of role-set relations of boundary personnel of the focal organization, with their role partners in organizations constituting the input and output organization-sets, various transactions occur involving the flows of people, information, capital, influence, goods, services, and so forth.

Apart from distinguishing between input and output boundary roles, other dimensions need to be identified if we are to generate new propositions about interorganizational relations. The most obvious way of distinguishing between the input and output boundary personnel of one organization compared with those of another is in sheer number, absolute or relative. One could devise various ratios of boundary to nonboundary personnel of the focal organization's input and output sets. A second dimension is the quality of formal education

or the degree of expertise of boundary personnel. It makes a substantial difference whether the house counsel, for example, is a graduate of an Ivy League law school or a night law school.

A third dimension is position in the organizational hierarchy. Whether the boundary person is a shipping clerk, a director of research and development, or a top executive will obviously influence his or her relationship to role partners in other organizations. Is the boundary person authorized to engage in organizational decision making, in pre-decision-making activities, such as information gathering, or in non-decision-making activities, such as the internal technical activities of the organization? Parsons' (1960: 60–69) conceptualization of the three levels in the hierarchical structure of organizations is especially suggestive when applied to boundary roles. At the “technical level” in an organization, there may be a relatively large number of boundary roles as well as boundary personnel such as foremen, supervisors, purchasing agents, salesmen, and clerks engaged in the primary operations of the organization. Individually, they may have little impact on interorganizational relations, but collectively their effect may be of considerable significance. At the “managerial level” in an organization, the number of boundary roles is smaller, but the salience of the managers' behavior, individually and collectively, for interorganizational relations is probably greater than that of the behavior of boundary personnel at the technical level. Managers also differ from the personnel at the technical level in that they are preoccupied with the tactics of organizational goal formation and decision making. At the “institutional level” in an organization's hierarchy, where the focus is on strategies of goal formation and decision making, there are substantially fewer boundary roles and boundary personnel than at the managerial level, and the decision-making power of such personnel—top executives, members of the board of directors or board of trustees—in their role-set relations at the interface of the focal organization is appreciably greater (Chandler, 1962).

A fourth dimension of boundary roles is the normative reference group orientation of boundary personnel. Do they orient themselves to the norms and values of their own organization (i.e., of the focal organization) or to those of some other organization? Boundary personnel whose normative reference group is their own organization (i.e., the focal organization) will exhibit greater loyalty in their external role-set relations than those whose normative reference group is an outside organization. Organizations that employ large numbers of professionals, such as universities, hospitals, and research and development organizations, bear the brunt of a cosmopolitan normative reference group orientation that may result in behavior that impedes organizational goal attainment, including the costs entailed in a high turnover rate (Gouldner, 1957, 1958).

An analysis of the personnel occupying the boundary roles of a focal organization would be guided by the dimensions identified above as well as by the dimensions of its input and output organization-set. By way of illustrating the heuristic value of our model, we suggest the following hypotheses:

1. As the size of the input organization-set increases, the number of input boundary personnel of the focal organization increases.

2. As the diversity or heterogeneity of the input organization-set increases, the input boundary roles within the focal organization become increasingly differentiated.
3. A similar positive relationship is anticipated between the size and diversity of the output organization-set and the number and role differentiation of output boundary personnel of the focal organization.
4. As the input and output organization-sets become more "turbulent" and uncertain, the input and output boundary roles of the focal organization become more functionally differentiated (Emery and Trist, 1965).
5. If the boundary personnel of the focal organization are not commensurate in number, quality of education, expertise, position in the organizational hierarchy, and normative reference group orientation with the boundary personnel of organizations comprising the input and output organization-sets, the effectiveness of the focal organization will be impaired.

IMPLICATIONS OF THE MODEL FOR A THEORY OF ORGANIZATIONAL CHANGE

The organization-set model outlined above is incomplete in two respects: it needs to be further developed theoretically and operationalized before it can be put to an empirical test. In its present state, it is principally a systems approach to organizational structure and ecology. Upon first consideration, the model may suggest a static approach to organizational phenomena. Further examination reveals implications for a positive as well as a normative theory of organizational change. Insofar as it generates explanations for organizational stability as well as predictions concerning organizational change, it qualifies as a positive or descriptive theory; and insofar as it suggests guidelines for effecting organizational change, it meets the test of a normative theory. In either case, the level of analysis of this model and its implications for a theory of organizational change are principally sociological in nature.

In attending to the internal structure of the focal organization, we are focusing on the structure of roles at the three levels in the hierarchy (technical, managerial, and institutional) and inquiring into (1) the characteristics of the boundary roles and boundary personnel in terms of the four dimensions identified above; and (2) the functions performed by boundary personnel in relation to their role partners located in organizations comprising the input and output organization-sets. In examining the input and output sets of the focal organization, such structural dimensions as size, diversity, and network configuration are considered in order to ascertain the sources of support for, opposition to, and constraints on the focal organization.

From the concepts and assumptions of our model, it follows that the effectiveness of the focal organization, regardless of its objectives, is a function of

(1) internal structure, particularly its role structure; and (2) the characteristics of its input and output sets. We may also infer the following proposition of a positive nature with respect to organizational change: as the input or output organization-set undergoes change as regards size, diversity, network configuration, and so on, the internal structure and level of effectiveness of the focal organization will also change. The direction of causality is in principle reversible; that is, if the focal organization's internal structure (role structure and/or technology) undergoes change, the input and output organization-sets will likewise change. Neither of these propositions, of course, precludes the occurrence of time lags before adaptive responses are triggered (see Chapter 7). Organizational change, in the sense of growth, occurs when the feedback effects are positive but controlled. It goes without saying that uncontrolled positive feedback effects can destroy the focal organization; that excessive time lags before adaptive responses occur—especially on the part of boundary personnel at all three hierarchical levels of the focal organization—can undermine organizational effectiveness; and that if no appreciable structural change occurs within a given time interval in the focal organization as well as in its input and output sets, the focal organization can be characterized as stable.

Our model also has implications for a normative theory of organizational change in that it in effect directs change agents—whether internal or external—to intervene at several crucial junctures in organizational functioning. First and foremost, in recruiting personnel for boundary roles at the three hierarchical levels, special attention is warranted in assessing their potential efficacy in interactions with role partners in organizations comprising the input and output sets. Second, to the extent that the socialization of new and old members involves formal and planned activities, particular attention should be devoted to the handling of role-set problems of boundary personnel. In all likelihood, the incidence of role conflicts and role ambiguities is higher among the occupants of boundary roles than nonboundary roles. Hence, if boundary personnel were helped through specially designed training programs to increase their level of competence in managing role-set conflicts and ambiguities, it could noticeably improve their role performance. Third, special efforts are necessary at each of the three levels in the hierarchy of the focal organization for redesigning the interaction network in the input and output organization-sets with a view to increasing organizational effectiveness. Innovative ideas designed to alter the organizational ecology of the focal organization may include proposals for cooperation, cooptation, bargaining, coalition formation, consortia formation, amalgamation, and the like with members of the input and output organization-sets (see Chapter 9).

Clearly, normative guidelines such as these that are derived from our model differ from but are not incompatible with the psychological and social-psychological propositions of theories of change emerging under the rubric of "organizational development" (Beckhard, 1969; Bennis, 1969; Blake and Morton, 1969). Since few organizational field experiments have thus far been performed, we are not yet in a position to assess the relative merits of different normative theories of organizational change (Evan, 1971). Much systematic

field experimentation will be needed to test the validity of propositions derivable from our model as compared with those derivable from organization development models.

ANALYSIS OF SOME CASES OF INTERORGANIZATIONAL RELATIONS

In the absence of systematic empirical research designed to test some of the propositions derived from the organization-set model and to develop it further, it may prove instructive to make an analysis of four cases of “organizational failure” with the aid of the model (Williamson, 1970). The cases selected are four administrative agencies—the Securities and Exchange Commission (SEC), the Interstate Commerce Commission (ICC), the Food and Drug Administration (FDA), and the Federal Trade Commission (FTC)—charged with regulating industry in order to protect the “public interest.” Our purpose is confined to using our model to throw light on some of the well-known defects of these regulatory bodies. We shall not seek to develop remedies for the organizational failures, which would, of course, far exceed the scope of this chapter.

Securities and Exchange Commission

Charged with regulating the securities industry, the SEC’s organizational defects, compared with those of the other three regulatory agencies, are least conspicuous (Report of the Special Study of Securities, 1963). If we consider the SEC as the focal organization for our analysis, as is shown in Figure 10.2, the members of its input set at a given time may include Congress, which votes on its annual appropriations; the president, who appoints the commissioners with the confirmation of the Senate; the federal courts, including the Supreme Court, which may accept some of the decisions of the SEC for judicial review; and other government agencies with which it may interchange information, people, and so on. The SEC’s output set is huge; it consists of many thousands

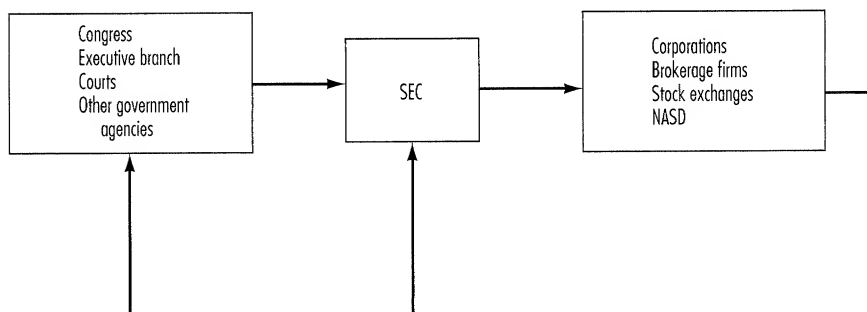


Figure 10.2 An organization-set analysis of the SEC.

of public corporations whose securities come under the scrutiny of the SEC in accordance with the rules of disclosure promulgated in the Securities Exchange Act of 1934. In addition, the output set includes many thousands of brokerage firms selling securities to the investing public. In view of the enormous size and diversity of the SEC's output set, the Securities Exchange Act provides for self-regulatory bodies, namely, the 14 stock exchanges, which exercise control over its member firms, and the National Association of Securities Dealers (NASD), which regulates the conduct of corporations whose securities are sold in the over-the-counter market and not on the stock exchanges. Any corporation or brokerage firm that is found in violation of the Securities Exchange Act may be investigated by the SEC. Some of its decisions may in turn be appealed in the courts, whose decisions in turn affect the SEC's actions. And to the extent that the securities industry engages in direct lobbying with the SEC or in indirect lobbying in Congress to protect itself against the enforcement efforts of the SEC, it becomes a member of the SEC's input set, thus illustrating a positive feedback effect.

Given the SEC's mandate to regulate the securities industry, the complexity of its output set poses many problems. The SEC's efforts at regulating the stock exchanges apparently have been more effective than the efforts of either the NASD in relation to its members or the several stock exchanges in relation to their member brokerage firms. This difference in enforcement effectiveness of the law may be largely a function of the size of the output sets of the different focal organizations. The SEC's regulatory problems in relation to the 14 stock exchanges are considerably fewer than are those of the 14 exchanges vis-à-vis their thousands of brokerage firms or of the NASD's problems in relation to its thousands of member firms.

Another facet of the pattern of interorganizational relations that may significantly affect the enforcement efficiency of the SEC is the flow of personnel from the regulatory to the self-regulatory agencies and to the regulated organizations. Although the interchange of SEC boundary personnel with members of its output set was not documented in the 1963 study, it is a plausible conjecture that the normative reference group orientation of many of its boundary personnel is the securities industry rather than the SEC (Report of the Special Study of Securities, 1963). "If the reference group of a substantial proportion of the personnel of the SEC is the brokerage community rather than the regulatory bodies, then the SEC's enforcement efficiency of legal norms is likely to be impaired" (Evan and Levin, 1966).

Interstate Commerce Commission

The formal composition of the input set of the ICC is similar to that of the SEC. Its output set, however, is probably smaller, consisting of approximately 17,000 railway, trucking, shipping, and pipeline companies engaged in interstate commerce; it is also probably more diverse, and, unlike that of the securities industry, there is no provision for self-regulatory agencies. The members of the output set are organized into several influential trade and professional

associations: American Association of Railroads, American Trucking Association, Water Carriers Association, Motor Carrier Lawyers Associations, and ICC Practitioners (Fellmeth, 1970). Conspicuously absent from the output set is any organization representing consumer interests. Compared with the large number of company lawyers and lobbyists representing industry interests, the staff of the ICC, numbering 1,906 in 1969, appears minuscule.

Further hampering effective regulation of the transportation industry is the ICC's extensive informal and formal contacts with industry. Notwithstanding the ICC Canons of Conduct prohibiting employees from engaging in any behavior that could affect their impartiality or adversely affect the confidence of the public in the integrity of the commission, "industry regularly pays for luncheons, hotel rooms . . . , Commissioners and upper staff are commonly transported around at their convenience by corporate jets, private rail cars, and pleasure yachts" (Fellmeth, 1970: 16, 19). There are recurrent conferences between the ICC and 17 organized groups representing the interests of the transportation industry, none of which represents consumers or the "public interest" (Fellmeth, 1970: 346–349). Through these informal and formal contacts, members of the output set become in the course of time members of the input set, influencing information gathering as well as policy formulation.

Promoting this type of feedback effect is a frequent flow of ICC employees to industry. Of the last 11 commissioners to leave the ICC, 6 became top executives of companies in the transportation industry, 3 became ICC practitioners, and 2 retired (Fellmeth, 1970: 20–21):

The manner in which agency officials lay down the regulatory cudgel and pick up the industrial cudgel by changing jobs indicates that they feel an identity between the two roles. . . . Aware that the door to industry employment is open, a Commissioner may keep it ajar by passive regulation that does not step on industry's toes.

Under the circumstances, the boundary personnel of the focal organization and the members of the output set tend to develop a common normative reference group orientation. This factor, together with the absence of an effective countervailing organization representing consumer interests in the input and output sets, encourages passive regulation of ICC statutes.

Food and Drug Administration

A regulatory agency that is a division of the Department of Health and Human Services, the FDA, as the name implies, is charged with regulating two mammoth industries. From its annual budget of over \$70 million, \$23 million is allocated to programs designed to protect the food supply and the balance to protect the supply of drugs and cosmetics (Turner, 1970: 2–3). To enforce the various FDA statutes, this agency employs approximately 5,000 people, including inspectors, scientists, other specialists, and technicians.

The members of FDA's input set, apart from the administration of HHS, are similar to that of the SEC and the ICC. Its output set, however, is larger and more diverse than that of the ICC. It consists of about 50,000 food manufacturing firms, over 1,000 pharmaceutical firms, several trade associations such as the Pharmaceutical Manufacturers Association (PMA) and the Grocery Manufacturers of America, and professional associations, notably the American Medical Association (AMA). Once again we note the absence from the output set of any organized consumer group to exercise countervailing power against other organized interest groups. The coalition between the AMA and the PMA has been especially effective in exercising direct influence on FDA decision making as well as indirect influence through Congress by means of political campaign contributions. Since the agency engages in very little original research on food and drugs, it has become increasingly dependent on the research of industry: "Seventy percent of all food standards are initially proposed by the food industry. Nearly all research on food additive safety is conducted by industry, not FDA" (Turner, 1970: 103). Thus, as in the case of the ICC, the "regulatees" have succeeded over time in obtaining access to the input set of the regulators.

Further resembling the ICC, the boundary between the FDA and members of its output set is indeed permeable. Between 1959 and 1963, of the 813 scientific, medical, and technical employees who left the FDA, 83 transferred to companies the FDA regulates, 632 were not employed in regulated industries, and information on the remaining 98 was unavailable (Mintz, 1965: 177). Dr. Louis Lasagne, a pharmacologist, commenting on this interchange of personnel, noted that the

subtle and potentially most dangerous aspect of the FDA setup [is] the well traveled, two-way street between industry and Washington. Men from the drug industry have gone on to the FDA jobs and—more important—FDA specialists have gone on to lucrative executive jobs in industry. . . . It does not seem desirable to have in decision-making positions, scientists who are consciously or unconsciously always contemplating the possibility that their futures may be determined by their rapport with industry. (Mintz, 1965: 175–176)

Mintz (1965: 178), who has conducted an extensive study of FDA's regulation of the drug industry, points to yet another pattern of interchange of boundary personnel between the FDA and members of its output set:

There has also been a rather more complicated series of movements among the three power centers, the Food and Drug Administration, the Pharmaceutical Manufacturers Association and its member firms, and the American Medical Association—the three components of the FDA–PMA–AMA molecule.

The following are cases in point. Before becoming head of Winthrop Laboratories, Dr. Theodore G. Klumpp had in the late 1930's been chief medical officer of the Drug Division at FDA, subsequently leaving to take a post in the AMA. C. Joseph Stetler, who had been counsel of the AMA and head of its Socioeconomic Division, found it possible to improve his socioeconomic position by becoming

executive vice president of the PMA. Dr. Jean K. Weston was with Parke, Davis from 1951 to 1962, when he left his position as head of the firm's Department of Clinical Investigation to join Burroughs Wellcome & Co. In June 1964, Dr. Weston became director of the AMA's Department of Drugs and secretary of its Council on Drugs.

In view of these flows of personnel, it is not surprising that the FDA has opted for a program of voluntary compliance rather than one of strict enforcement of the law:

Under the FDA's voluntary compliance program, thirty-four thousand representatives of five thousand regulated firms have attended 325 workshops and forty national conferences between 1965 and 1970. The purpose of this massive effort was to help give industry a better understanding of the law and FDA regulations, to make available to industry benefits of FDA research and methodology to help solve contamination and other problems, and to encourage maximum self-regulation. (Turner, 1970: 105).

Federal Trade Commission

As an independent regulatory agency, the FTC has a dual mission: to counteract monopoly practices (restraints of trade, unfair methods of competition, etc.) and consumer fraud ("deceptive acts and practices"). In 1991, its staff numbered 950, of whom 471 were lawyers and 75 were economists and other professionals; its budget was \$74,095,000 (I obtained the 1991 date by personal communication; see p. 169). In investigating compliance with various statutes, FTC lawyers perform a crucial function as boundary personnel. Hence, the questions raised about the quality of the education and the expertise of FTC lawyers touch on an important facet of the enforcement effectiveness of this agency.

In recruiting attorneys, the FTC evidently attaches more significance to regional background, old school ties, and political endorsement of applicants than to their ability as reflected in grades or in the quality of the law schools they attended (Cox, Fellmeth, and Schulz, 1969: 150). "As a result, graduates of prestigious law schools such as Harvard and Pennsylvania, which offer outstanding courses in antitrust law, have a poor chance of joining the FTC, compared with graduates of law schools like Kentucky and Tennessee" (Cox, Fellmeth, and Schulz, 1969: 151). The authors' analysis of data on graduates of classes 1967 and 1968 from five Northern law schools (NYU, Georgetown, George Washington, St. John's, and Brooklyn) and three Southern law schools (Texas, Kentucky, and Tennessee) yielded the following result: 21 percent of applicants from Northern schools were offered appointments compared with 52 percent from Southern schools, a difference statistically significant at the .05 level (Cox, Fellmeth, and Schulz, 1969: 228). Moreover, according to a bureau chief of the FTC,

he preferred to hire older men—who had been out in the world for ten years or so and had come to appreciate that they were not going to make much of a

mark—because they tended to be loyal and remain with the FTC. He also reported that he gave less weight to law school grades than to other factors. (Kirkpatrick, 1969: 33)

To compound the problem of the expertise of its boundary personnel, the FTC lacks medical, scientific, and engineering specialists in its various bureaus that require them:

The FTC's large staff of lawyers also poses a problem of quite a different order—legal competence alone is often not enough for the job. The Division of Food and Drug Advertising in the Bureau of Deceptive Practices is a good case in point. It is responsible, among other things, for detecting and preventing deception in drug-product advertising. Yet it is staffed entirely by lawyers and has no doctors or scientists to advise it. . . . It is then not surprising that the Division of Food and Drug Advertising operates at a low level of energy. . . . It also does nothing at all to enforce the agency's laws on therapeutic devices. (Cox, Fellmeth, and Schulz, 1969: 158)

The formal composition of the input set of the FTC is the same as that of any other independent regulatory agency, such as the SEC or the ICC. Its output set, however, is both larger and more diverse, consisting of "hundreds of thousands of businesses" (Cox, Fellmeth, and Schulz, 1969: 57). Of this enormous population of firms engaged in manufacturing and merchandising activities, the FTC tends to shy away from investigating the compliance of large companies and disproportionately devotes its resources to relatively small firms, especially in textiles and furs (Kirkpatrick, 1969: 27). "The FTC's reluctance to go after big companies often lies in its fear of their vast and brilliant legal staffs—particularly if formal action is called for" (Cox, Fellmeth, and Schulz, 1969: 57).

Like the FDA, the FTC has deemphasized formal complaint procedures and concentrated on a program of voluntary compliance. Among the informal devices it employs, each of which lacks the force of law, are (1) industry guides; (2) advisory opinions; (3) trade regulation rules; and (4) assurances of voluntary compliance and informal corrective actions (Kirkpatrick, 1969: 27).

An analysis of various measures of FTC enforcement activities over a ten-year period has prompted the American Bar Association Commission to conclude that

through lack of effective direction, the FTC has failed to establish goals and priorities, to provide necessary guidance to its staff and to manage the flow of its work in an efficient and expeditious manner. All available statistical measures of FTC activity show a downward trend in virtually all categories of its activities in the face of a rising budget and increased staff. Moreover, present enforcement activity rests heavily on a voluntary compliance program devoid of effective surveillance or sanctions. It thus appears that both the volume and the force of FTC law enforcement have declined during this decade. (Kirkpatrick, 1969: 1)

This impressive record of organizational failure on the part of the FTC and various other regulatory agencies has stimulated some observers to call for major organizational reforms and others to wonder whether these agencies ought not to be abolished in favor of "greater reliance on market processes and on the system of judicial rights and remedies" (Posner, 1969: 118).

CONCLUSION

The analysis of case materials, however instructive or suggestive it may be, is no substitute for systematic empirical inquiry designed to test and develop a model further. Let us consider, by way of conclusion, some implications of the model for organizational research. This may be regarded as yet another test of the heuristic value of the model. Given a particular substantive problem, the research procedure might be as follows: (1) ascertain the boundary roles and the boundary personnel of the focal organization; (2) ascertain the role-set relations and the transactions mediated by the role-set interactions; (3) map the members of the input and output sets; (4) establish the formal properties and modes of interaction with the input and output sets, especially as they have changed over at least two time intervals; and (5) trace feedback effects from the output organization-set to the focal organization and to the input organization-set.

This is indeed a tall order; the methodological imponderables underlying each of these five research procedures should not be minimized. Nevertheless, if a full-scale empirical study of organization-sets were successfully carried out, it might do for interorganizational theory what Gross, Mason, and McEachern (1958) and Kahn and his colleagues (1964a) have done for role theory (Gross, Mason, and McEachern 1964). In addition, it would in all likelihood yield various spin-offs for a normative theory of organization-set change, namely, how to modify input and output set interactions in order to increase the effectiveness of the focal organization.

Organization Theory, Administrative Law, and Government Agencies

With few notable exceptions, organizational researchers have not undertaken detailed studies of how government agencies interpret and implement their legal mandate and how they affect the organizations they are charged with regulating (Selznick, 1949; Blau, 1955; Downs, 1967; Nonet, 1969; Bell, 1985). The legal system, through the legislation process, establishes a plethora of administrative agencies and mandates interorganizational relations between a given administrative agency and a population of organizations (Evan, 1990). In the course of enforcing the law, administrative agencies at the local, state, and federal levels seek to regulate the behavior of organizations in various industries. How do these organizations respond to such efforts at regulation? What are some of the problems that recur in this type of interorganizational interaction? What are some of the consequences of administrative regulation? How can administrative agencies discharge their mandate rationally and with fidelity to their enabling laws?

These are but some of the questions that wait to be addressed by organizational researchers. In this chapter, some trends in administrative law and organization theory are compared with a view to clarifying the potential value of applying the organization-set model in research on administrative agencies.

Each scientific or scholarly discipline or subdiscipline is propelled by intellectual and extraintellectual forces that tend to develop a momentum of their own. The elite of each discipline perform at least two functions: (1) they create the dominant "paradigm(s)," which nonelite members follow, often much too faithfully; and (2) they stand guard at the frontier to prevent encroachment (Kuhn, 1970). Any effort to cross the frontier of a discipline is apt to be hazardous unless the discipline is in the midst of a crisis in its dominant paradigm(s). Social scientists have encountered some formidable obstacles in crossing the boundary of law. And any legal scholar who has had the temerity to study behavior with respect to legal phenomena outside the conventional context of judicial decisions may have also experienced a share of frustrations.¹

Several decades ago a debate was aired in the pages of the *Journal of Legal Education* on behavioral science and administrative law between the political scientist Grundstein (1964) and the eminent authority on administrative law Davis (1964). Grundstein argued that administrative law had in effect reached a dead end in its development and was on the verge of being transformed with the help of behavioral science theories and methodologies, and, in particular, through systems analysis and simulation. Davis (1964: 151) countered by pointing out that traditional administrative law was an evolving discipline; that although some contributions in behavioral science were impressive, others were vacuous; and that if "behaviorally-oriented research" produces anything of value "it will be readily and easily absorbed into administrative law research." As a disinterested observer from another discipline, I must confess that I found Davis's arguments more persuasive.

My purpose in this chapter, however, is not to resume this debate but rather to examine (1) some trends in American administrative law; (2) some trends in organization theory; (3) an organization-set model of the administrative process; and (4) several potentially fruitful research strategies. Although the focus will be almost exclusively on American administrative law, my analysis will have implications for comparative research on legal systems (Merryman, 1974). An underlying assumption of this chapter is that the sociology of law (Evan, 1990) can perform the midwife role in the birth of a new style of research linking administrative law with organization theory.

THE EXPANDING ROLE OF GOVERNMENT ADMINISTRATION

Before considering some trends in American administrative law, several brief observations concerning the expanding role of government administration are in order. As Galanter (1966: 153) puts it, "throughout the world, there has been a proliferation of governmental responsibility and a growth of new areas of law."

Weber's theory of bureaucracy is concerned with characterizing organizations in terms of his ideal type of bureaucracy and with the rise of bureaucracy as an indispensable element in the development of modern Western societies. In

¹ For an exceptionally happy and successful venture in interdisciplinary research, however, see Kalven (1974).

the decades since Weber's work appeared, it has become apparent that his analysis may be as relevant for centrally planned economies as for market economies, and for societies in the process of development as well as for those that are highly developed. In their effort to achieve modernization, developing countries are all too often severely hampered because of their failure to design an effective system of government bureaucracy as an integral component of their legal system. In his analysis of 11 features of a modern legal system, Galanter might have explicitly included the development of a rational-legal system of government administration.

Davis (1972: 5) has captured the pervasiveness of government administration in the United States with the following observation:

The ordinary person probably regards the judicial process as somewhat remote from his own problems; a large portion of all people go through life without ever being a party to a lawsuit. But the administrative process affects nearly every one in many ways nearly every day. The pervasiveness of the effects of the administrative process on the average person can quickly be appreciated by running over a few samples of what the administrative process protects against: air and water pollution; excessive prices of electricity, gas, telephone, and other utility services, unreasonableness in rates, schedules, and services of airlines, railroads, street cars, and buses; disregard for the public interest in radio and television and chaotic conditions for broadcasting; unwholesome meat and poultry; adulteration in food; fraud or inadequate disclosure in sale of securities; physically unsafe locomotives, ships, airplanes, bridges, elevators; unfair labor practices by either employers or unions; false advertising and other unfair or deceptive practices; inadequate safety appliances.

In terms of the sheer number of administrative agencies at the federal level, in 1949 the Code of Federal Regulation listed 155 agencies; in 1973 the number had virtually doubled—even if allowances are made for multiple listings (Davis, 1958; Office of the Federal Register, 1973). At the state and local levels there are undoubtedly many thousands of administrative agencies, and their growth for this period has in all likelihood been similar. Small wonder then that the case load of the federal agencies far outstrips that of the federal courts. For example, in 1963, according to Davis (1971: 4),

the number of civil cases filed in all federal district courts was 63,630 and the number of civil trials was 7,095. In the agencies the number of cases filed is in the millions, but stripping down to the small portion of the cases involving "an oral hearing with a verbatim transcript" and "the determination of private rights, privileges, or obligations," and excluding determinations solely on written applications or on oral presentations in the nature of conference or interview, the number is 81,469 cases disposed of.

Admittedly the 11:1 ratio of administrative to judicial cases is crude. However, even if further refinements were made—as Davis suggests—to make the statistics more nearly comparable, the ratio would still be heavily weighted in the direction of administrative adjudication. This comparison suggests that it

might be instructive to develop a cross-national time series for a sample of nation-states, both developed and developing, to test the hypothesis that as the level of economic development increases, the ratio of administrative cases to judicial cases increases. Associated with this hypothesized relationship are such features of modern legal systems as increasing technical complexity and increasing requirements for professional personnel, both of which may be more true of administrative agencies than of courts (Galanter, 1966: 155–156).

SOME TRENDS IN AMERICAN ADMINISTRATIVE LAW

In his 1970 Supplement to his treatise on American administrative law, Davis (1971: 1) states that his original definition of administrative law is still accurate, namely, that it is “the law concerning the powers and procedures of administrative agencies, including especially the law governing judicial review of administrative action.” However, he acknowledges that a more comprehensive view of the subject is now required, and that instead of focusing exclusively on regulatory agencies, particularly those that are independent agencies, it is equally necessary to attend to agencies in the executive branch and, more generally, to *all* administrative agencies, whether federal, state, or local.

This major extension in the scope of this field requires a classification of agencies by type of function other than type of regulation. For example, is it sufficient to classify agencies according to whether their primary purpose is to regulate an industry (e.g., the Interstate Commerce Commission [ICC]), provide benefits (e.g., the Social Security Administration), render a service (e.g., the U.S. Postal Service), give grants (e.g., the National Science Foundation), or award government contracts (e.g., an office of procurement of the Department of Defense)? Schwartz and Wade (1972: 27–42), in their comparative analysis of administrative law in Britain and the United States, distinguish between regulatory and benefactor agencies. Britain’s agencies are largely of the latter type, since their method of economic regulation entails nationalizing industry or establishing special public corporations.

In the course of defining administrative law, Davis (1971: 3–4) also indicates what it is not, to wit:

Apart from judicial review, the manner in which public officers handle business unrelated to adjudication or rule making is not a part of administrative law; this means that much of what political scientists call “public administration” is excluded. Administrative law is also confined to arrangements involving rights of private parties; it does not extend to internal problems affecting only the agencies and their officers and staffs.

These exclusions, as we shall see, unnecessarily constrict the purview of scholars in administrative law.

Another distinctive feature of Davis’ 1970 Supplement to his treatise is his delineation of the four stages of the development of the discipline. The first

stage dealt with the constitutional bases of the administrative process; hence the concern with the doctrine of delegation of power from the legislature to the administrative agency and with the separation of powers in view of the fact that agencies were accorded legislative, judicial, and executive functions. The second stage focused on problems of judicial review, which gave rise to many doctrines pertaining to the reviewability of administrative actions and to the scope of review. The third stage, which characterizes the present state of the field, is concerned with procedures in rule making and adjudication as reflected in the passage in 1946 of the Administrative Procedure Act. During the current stage, a plethora of procedural doctrines have been the center of attention, for example, institutional decisions, subdelegation of powers within the agency, separation of functions within the agency, due process requirements, sovereign immunity, and tort liability of public officials. It is the intensive preoccupation with such diverse procedural doctrines that has prompted some political scientists, for example, Grundstein (1964: 122), to complain that "procedure has been an obsessive concern of American administrative law and research has been subordinated to this concern with procedure."

The fourth stage, to which Davis wishes to direct the field, would be concerned with an understanding of discretionary justice. He admits that his treatise, which is concerned with formal procedure and judicial review, deals with only 10 to 20 percent of the administrative process:

Yet the strongest need and the greatest promise for improving the quality of justice to individual parties in the entire legal and governmental system are in the areas where decisions necessarily depend more upon discretion than upon rules and principles and where formal hearings and judicial review are mostly irrelevant. The reason the literature of administrative law, as well as that of jurisprudence and of public administration, has almost completely neglected the vital eighty or ninety percent is that the subject is so exceedingly elusive. (Davis, 1969: vi)

How the transition to the new stage will be made—by means of conventional methods of legal research and legal doctrines or with the help of new methods and theories borrowed from other disciplines—Davis does not say. Judging from his ongoing comparative study of discretionary justice in five countries, Davis (private communication, 1973) is evidently willing to depart from conventional modes of legal research.

A quite different perspective on trends in American administrative law is reflected in the work of Schwartz and his British collaborator, Wade. Schwartz notes that

Administrative Law until now has been concerned almost entirely with property rights and the extent to and the manner in which they might be regulated by governmental power. The Administrative Law of the future must direct itself to the rights of the person, seeking to ensure a place for the individual vis-à-vis the state in the type of society toward which we are evolving. (Kass, 1966: 77)

Schwartz' formulation is related to the worldwide interest in the Scandinavian Ombudsman concept as an institutional device to protect citizens against administrative injustice.²

Wade's transatlantic perspective on changes in administrative law is also noteworthy:

To an English lawyer it is interesting to see how in a few years the emphasis in American administrative law has shifted. Formerly it seemed to be preoccupied, at the federal level at least, with tempering the control of the big regulatory agencies over powerful businesses such as power companies, airlines, broadcasting networks and stockbrokers. The agencies in time became the allies of businesses and there resulted what was called "a welfare state for the wealthy." Today the preoccupation is with social and communal welfare, most of all for the poor. The courts are prodding the administrators into adopting fair rules and fair procedures for enforcing them. The doctrines worked out for the welfare of the wealthy are reaching down the scale into regions where, apparently, arbitrary power used to reign. (Schwartz and Wade, 1972: 313)

Yet another trend in American administrative law is the increasing concern with assessing the performance of administrative agencies, particularly of regulatory bodies. This problem has evoked the interest not only of legal scholars but also of economists, various government commissions and consultants, and consumer advocates.

Economists have conducted an extensive amount of research on the economic effects of regulation and have generally concluded that it either has no impact or that it produces no net benefit relative to costs. Thus, for example, Stigler and Friedland (1962), in their study of electrical utilities, found no significant effects either with respect to rates or to rates of return on investment; MacAvoy (1970) has observed no net benefits from the regulation of public utilities; and Joskow (1973), in his study of the property insurance industry, also emerged with the negative finding as to the impact of regulation, so much so that he encourages states to eliminate formal rate regulation.

Among the two appraisals of regulatory commissions in an effort to "reorganize" and "reform" them so that they will more faithfully fulfill their legislative mandate, those by Landis (1960) and the Ash council (President's Advisory Council on Executive Organization, 1971) are especially noteworthy. Deploring the delay in disposition of administrative cases, time-consuming procedures, and the failure to delegate routine problems, Landis made a variety of recommendations principally aimed at augmenting control by the executive branch over the independent agencies. A decade later the Ash council again recommended greater presidential rather than congressional control over the agencies and, in addition, proposed merging transportation agencies (the ICC, the Civil Aeronautics Board, and the Federal Aviation Administration) and subdividing the Federal Trade Commission into two agencies, one dealing with antitrust activity and one with consumer protection.

² Davis (1961); Gellhorn (1965, 1968); Rowat (1968); Peel (1968); Evan (1973b).

Consumer advocates, notably Nader and his associates, have exposed the failure of various regulatory agencies to promote the "public interest." They have documented in some detail that some of these agencies, such as the ICC and the Food and Drug Administration, have been "captured" by the regulated industries (Fellmeth, 1970: 16, 19; Turner, 1970: 103).

To be sure, administrative law scholars have themselves critically evaluated some of the agencies. In his statistical study of antitrust enforcement of the Department of Justice, Posner (1970) charges the department with making little effort to identify monopolistic markets, with not seeing to it that its decrees are complied with, and with not keeping any useful statistics on its own activities (Posner 1970: 419). He concludes his indictment with the telling assertion that it is "inappropriately run as a law firm, where the workload is determined by the wishes of the clients (in this case most unhappy competitors, aggrieved purchasers, and disgruntled employees), and where the social product of the legal services undertaken is not measured."

Jaffe (1973), a distinguished authority on administrative law, criticizes the "broad delegation model" of administrative agencies, that is, that they operate more effectively when the legislative mandate is vague rather than well defined. In the course of advancing his conception that "the political process . . . provides the milieu and defines the operation of each agency," Jaffe (1973: 1188-1190) formulates several potentially testable propositions that would gladden the heart of any social scientist reading his article:

Where the ends and means of an agency's role are highly defined, elaborately rationalized—as is the case with tax or social security—the effects of the political process on the agency are marginal though rationalization could never go so far as totally to exclude political choice. . . . Such agencies are to be judged in terms of their fair, uniform, and zealous application of well-articulated law; the very precision of the law may help to reduce pressures from the regulated.

[W]here in form or in substance the legislative design is incomplete, uncertain, or inchoate, a political process will take place in and around the agency, with the likely outcome a function of the usual variables which determine the product of lawmaking institutions.

[A]n agency faced with an uncertain congressional mandate may do no more than it believes Congress expects it to do, which may, be nothing.

Another recurrent problem in assessing the performance of administrative agencies is the nature of the relationship between the regulatory agency and the client organizations it is charged with regulating. Schwartz and Wade (1972: 32-33) have formulated an intriguing "life cycle" hypothesis concerning this relationship that, as in the case of Jaffe's formulation, is empirically testable:

The influence of regulated upon regulators tends to increase progressively as the regulatory commissions go through what has been seen to be their typical "life cycle." The federal commissions have all gone through periods of youth, maturity, and old age, with their development dominated by what has been termed

the progressive law of ossification. It is only during its youthful phase that the commission is vigorous in fighting for the public interest. As time goes on, it loses its early enthusiasm, and administrative aggressiveness is increasingly replaced by apathy. During the phase of maturity, the regulated direct their energies toward taking over the regulators and the commission tends more and more to equate the "public interest" with the interests of the regulated groups. This tendency is carried further in the commission's old age, when it has more or less come to terms with those whom it is ostensibly regulating. Over the years there develops a relationship which can be described only as regulatory symbiosis: regulators and regulated have learned to live with each other and have, in fact, grown intimately dependent on each other.

Two other developments in American administrative law are noteworthy. First, in 1964, a new federal administrative agency—the Administrative Conference of the United States—was established for the purpose of studying administrative agencies and for collecting and disseminating information about them (Davis, 1971: 9–11). This agency subsequently adopted many recommendations, including one pertaining to the "compilation of statistics on administrative proceedings by federal departments and agencies" (Davis, 1971: 11). To implement this decision, the Administrative Conference has developed a "case load accounting system for administrative agency proceedings" that would make it possible to compare various agencies on this dimension of performance (Halloran, 1974). In a recent report in which this system is presented, the author compares the average number of cases disposed of per year by hearing examiners—now upgraded and designated "administrative law judges"—in 16 federal agencies with the average number of cases terminated per year by judges of the U.S. District Courts. According to this study, the performance of federal judges is significantly higher than that of administrative law judges (Halloran, 1974: 8).

Second, the Board of Governors of the American Bar Association, following the recommendation of its Section of Administrative Law, has created a Center for Administrative Justice. The goals of the Center include "the provision of a central source of information and research materials pertaining to administrative law at all levels of government . . . and [the] conducting of basic research both on its own and on behalf of government agencies or private organizations" (Davis, 1973: 349). If these goals are fulfilled in an imaginative manner, we would have another source of data on the functioning of administrative agencies.

From the perspective of the sociologist of law and the organization theorist, the foregoing discussion of trends in American administrative law suggests an increasing sensitivity to problems of administrative law in action. It also suggests that the perennial problems of administrative agencies are unlikely to be solved within the framework of the dominant paradigm in American administrative law. This much is clear from the ongoing work of such administrative law scholars as Davis (1971), Posner (1972), Freedman (1972), and others. Do these trends, however, make this field more receptive to the contributions of organization theory?

SOME TRENDS IN ORGANIZATION THEORY

Compared with administrative law, the field of organization theory appears to be highly abstract, diffuse, and even chaotic. In spite of its name, there is no *one* commanding theory but a variety of theories differing in scope—some quite narrow, some middle range, and some grand in design. It is in itself an interdisciplinary field on which diverse social sciences, management sciences, and even engineering have converged because of the challenging problems of better understanding and designing complex organizations. It has its roots in the work of the classical school, including Taylor and Fayol in scientific management, and Gulick, Urwick, and others in public administration (March and Simon, 1958). Weber, whose theory of bureaucracy has had a pervasive impact on the course of research, has a close kinship with the classical school in his emphasis on the structure of organizations. In fact, in the empirical work of sociologists in the past two decades, we encounter the first significant trend in the field, namely, the concern with delineating organizational structure. Instead of using Weber's ideal type of bureaucracy, various dimensions have been conceptualized pertaining to his rational-legal, monocratic system of authority. As a result, such organizational variables as the following have been operationalized: centralization of decision making, administrative intensity (which includes the classical notion of "span of control" and various ratios of managerial to nonmanagerial personnel), the degree of formalization (i.e., the emphasis on written rules governing the conduct of bureaucratic personnel), and the degree of professionalization of personnel because of the bureaucracy's reliance on expertise.

In the work of Blau and his students, the concern with structural variables is clearly in evidence (Blau and Schoenherr, 1971; Meyer, 1972b; Blau, 1973b; Heydebrand, 1973b). They have established interrelationships among such variables as organizational size, professionalization of personnel, functional and departmental specialization, and administrative intensity. For example, they have found that as organizational size increases, so does functional and departmental specialization.

The Aston group, that is, Pugh and his colleagues, has similarly focused on structural variables in their study of a sample of organizations in Britain (Pugh *et al.*, 1968: 65–105, 1969; Hickson, Pugh, and Pheyssey, 1969). They have investigated the interrelationships among such variables as functional specialization, formalization, administrative intensity, and centralization of decision making. In short, a dominant trend has emerged involving a *quantitative-structural* analysis of organizations.

In the course of pursuing this style of research, it has become evident that it is important to test hypotheses interrelating structural variables in organizations differing in function, hence the new *comparative* trend in organization theory. Another facet of this trend is the realization of the need for testing whether the structural relationships observed by Blau, Pugh, and their respective colleagues hold in other countries as well (McMillan, 1973; Hickson *et al.*, 1974; Evan, 1975a).

In his compilation of 30 comparative studies, all involving a quantitative-structural mode of analysis, Heydebrand (1973b) included only two conducted in government organizations, one dealing with state public personnel agencies of civil service commissions and the other with finance departments of state and local governments as well as with public personnel agencies. By comparison, 11 of the studies pertained to professional and service organizations such as hospitals and colleges, and 8 dealt with business organizations. Clearly, sociologists have paid scant attention to administrative agencies, a notable exception being Blau's (1955) study of a federal enforcement agency and a state employment agency. The pioneering work of Selznick (1949) on the Tennessee Valley Authority (TVA), using the case method to analyze dynamic processes, has not been followed up until the work of his student, Nonet (1969), on California's Industrial Accident Commission. In his historical analysis of this agency, Nonet (1969: 2) discerns a process of "legalization," that is, the "growth of the relevance of law in practical problem-solving, as well as to the elaboration of legal rules and doctrines that occurs in this process." This study is perhaps the clearest example in the literature of an effort to integrate concepts from organization theory and the sociology of law, on the one hand, with some concepts from administrative law, on the other.

A third trend in organizational research that is in part an outgrowth of the quantitative-structural trend is a concern with *longitudinal analysis* (Holdaway and Blowers, 1971; Hoge, 1974; Kimberly, 1974). Instead of studying relations among structural variables cross-sectionally, it is becoming increasingly clear that a longitudinal mode of analysis is essential. If there is a positive relation between centralization and formalization, does this persist over time or does it change, and if so, in which direction? Only a longitudinally designed study can throw light on such a question.

A fourth trend in organization theory is the increasing attention to *interorganizational relations*, especially since the principal focus of the quantitative-structural research discussed above has been on *intraorganizational relations*. In the work of Litwak and Rothman (1970), Downs (1967), and others, and in Chapters 9 and 10, we observe this emphasis in the field.

In his perceptive study of decision making of government bureaus, Downs (1967: 2) starts with the supposition that "every organization's social functions strongly influence its internal structure and behavior, and vice versa. This premise may seem rather obvious, but some organization theorists have in effect contradicted it by focusing their analyses almost exclusively on what happens within an organization." One of the important concepts and variables to emerge from the literature on interorganizational relations is organizational autonomy as it is related to the environmental forces impinging on a given organization.

In this field, it is the interorganizational trend *in conjunction with* the quantitative-structural, comparative, and longitudinal trends that can open the way for a new line of research on administrative agencies of potential value to both administrative law and organization theory.

AN ORGANIZATION-SET MODEL OF THE ADMINISTRATIVE PROCESS

In our brief discussion of recent trends in administrative law and organization theory, various concepts have been mentioned. It may now be instructive to juxtapose a "baker's dozen" concepts in each field, as I have done in Table 11.1. In only 5 of the 13 concepts—those I have asterisked—are there any conceptual correspondence. Thus, for example, institutional decisions presuppose a high degree of centralization in decision making, whereas subdelegation of power entails the decentralization of decision making. Similarly, rule making is close to the concept of formalization; the concern with the separation of functions—legislative, adjudicative, and executive—involves a process of departmental specialization; administrative discretion reflects in part a pattern of informal organization, namely, one that is not officially prescribed or sanctioned and entails a process of innovation.

To go beyond the mere drawing of interdisciplinary conceptual parallels requires a model in which some of these concepts can be used, thus building a bridge between the two disciplines (Evan, 1962c; Evan and Schwartz, 1964: 270–280). A first approximation will be attempted here.

The organization-set model that I have formulated elsewhere has two underlying assumptions (see Chapters 9 and 10). First, organizations in general and administrative agencies in particular are systems of interrelated elements interacting with other systems in their environment; hence, an application of a systems perspective is required. This assumption is similar to Downs' premise and to Jaffe's (1973: 1189) view that "each agency functions in a political milieu."

Table 11.1 Selected Concepts in American Administrative Law and Organization Theory^a

<i>American Administrative Law</i>	<i>Organizational Theory</i>
1. Delegation of powers	1. Organizational size
2. Separation of powers	2. Organizational age
3. Judicial review	3. Complexity of task structure
4. Substantial evidence rule	4. Technological complexity
5. Primary jurisdiction	5. Organizational effectiveness
6. Sovereign immunity	6. Organizational autonomy
7. Officer tort liability	7. Functional specialization
8. Administrative due process	8. Administrative intensity (bureaucratization)
*9. Institutional decisions	*9. Centralization of decision making
*10. Subdelegation of power	*10. Decentralization of decision making
*11. Rule making	*11. Formalization
*12. Separation of functions	*12. Departmental specialization
*13. Administrative discretion	*13. Informal organization and innovation

^a The items asterisked are examples of a degree of interdisciplinary conceptual parallelism.

A second assumption is that an organization's performance, however it may be conceptualized and measured, is a function of (1) its goals; (2) its internal organizational structure; (3) the role orientation of its members; and (4) its mode of interaction with its environing organizations.

The point of departure of this model is a consideration of several concepts in role theory developed by Merton (1957a) and Gross, Mason, and McEachern (1958). Instead of selecting a status as the unit of analysis and charting the complex of role relationships in which the status occupant is involved, as Merton does in his analysis of role-sets, I take as the unit of analysis an organization or a class of organizations and trace its interactions with various organizations in its environment, that is, with elements of its "organization-set." Following Gross, Mason, and McEachern's (1958: 50-56) use of the term "focal position" in their analysis of roles, I have referred to the organization or class of organizations that is the point of reference as the "focal organization" (Chapter 9). As in the case of role-set analysis, the focal organization interacts with a complement of organizations in its environment, that is, its organization-set. A systems analysis perspective, however, suggests that the organization-set be partitioned into an "input organization-set" and an "output organization-set." By an input organization-set, as the term suggests, I mean a complement of organizations that provides various types of resources to the focal organization. Similarly, by an output organization-set, I mean all organizations that are the recipients of the goods and/or services, including organizational decisions, generated by the focal organization. Furthermore, a systems analysis requires that we trace feedback effects from the output organization-set to the focal organization and thence to the input organization-set, or directly from the output to the input organization-set. These feedback effects can, of course, be positive or negative, as well as anticipated or unanticipated.

The four components of the model—focal organization, input organization-set, output organization-set, and feedback effects—may be jointly conceived as comprising an interorganizational system (see Chapter 10).

For purposes of illustration, if we take as a focal organization an administrative agency such as the FCC (see Figure 11.1), the input organization-set includes the Congress through its enabling act, the Appropriations Committee, and so on; the executive branch, including the president, who appoints the chairman and commissioners, and the various executive departments; the courts, whose past decisions become guides and constraints on the agency's fu-

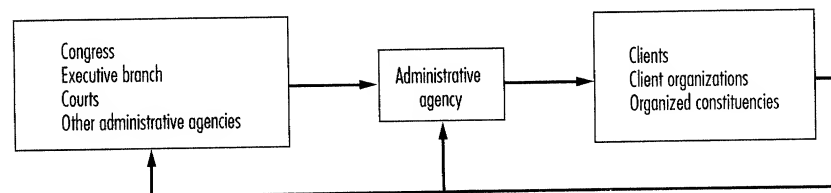


Figure 11.1 An organization-set analysis of an administrative agency.

ture actions; and other administrative agencies that may either support, help, or compete with the FCC for scarce resources. The degree to which the FCC is effective in managing the input organization-set, which is very likely plagued with conflict and uncertainty, affects its internal structure and in turn its capacity to perform its regulatory functions.

The output set consists of many thousands of radio and television stations whose licenses and programming are regulated by the FCC's decisions, various trade associations, and a bar association of attorneys in the communications industry.

The success with which the FCC manages its multifaceted relations with the members of its output organization-set in turn has feedback effects on the FCC as well as on the input organization-set, which again triggers the cycle of interorganizational systemic relations.³

Managing the boundary relations of the FCC with its input organization-set and its output organization-set are its various boundary personnel, principally attorneys who conduct investigations, administrative law judges, and liaison officers with Congress and the executive branch. At least two role attributes, expertise and loyalty, determine the behavior of the boundary personnel and cumulatively affect the performance of the FCC. If the boundary personnel are not high-caliber professionals, they will fail to apply the relevant agency rules or legal principles to the problems and facts at hand; and if the norms governing their conduct—their normative reference group—are derived from the regulated industry, rather than from the agency, they will again fail to perform their function with fidelity to the FCC's mandate. Greatly aggravating the dilemmas of the boundary personnel, as Jaffe (1973) points out, is the broad delegation of powers in terms of the concept of public interest.

In short, with the help of the organization-set model supplemented with relevant structural variables, it would be possible to study a sample of administrative agencies differing on such dimensions as type of delegation of power (broad versus narrow), life-cycle position, volume of rule making, scope of jurisdiction (federal, state, or local), and so on. Such an inquiry would be able to test propositions of interest to both administrative lawyers and organization theorists. One hypothesis, for example, is as follows:

Administrative agencies with a low degree of organizational autonomy will—all other things being equal—have:

1. *a high degree of centralization of decision making;*
2. *a high degree of formalization;*

³ A much-neglected study in this connection is Sutherland's (1949) pioneering inquiry into the decisions of agencies and courts on 70 corporations convicted of violations of the law pertaining to restraints of trade, misrepresentation of advertising, unfair labor practices, rebates, and the like. Sutherland was so preoccupied with using the statistical data on the 70 corporations to demonstrate his thesis of white collar crime that he did not exploit the opportunity of gathering data on the organizational structure of the corporations and their pattern of interaction with the administrative agencies.

3. *a high probability of rendering decisions in favor of organizations that can exercise substantial power over the agency;*
4. *a low proportion of professionals with a high commitment to the legislative mandate; and*
5. *a low level of performance, for example, as measured by the case load of its personnel.*

To clarify further how the organization-set model would be applied in an empirical study of administrative agencies, 25 variables illustrating the four components of the model are enumerated in Table 11.2. Variables 1 to 6, which are indicators of the input organization-set, include a composite measure of organizational autonomy (Variable 6), namely, of the administrative agency.⁴ Variables 7 to 17, which are indicators of the structure of the focal organization, resemble those Blau, Pugh, and their respective colleagues have employed in their studies. The four output organization-set variables (18 to 21) include a composite measure of the degree of regulatory resistance to the focal organization.⁵ Finally, the four output variables (22 to 25), which include a composite measure of organizational effectiveness of the agency, would provide a basis for ascertaining negative and positive feedback effects of the interorganizational system.

It should be evident that these 25 variables—particularly those purporting to measure agency effectiveness—offer only a first approximation of the kind of effort that would be required in any empirical application of the model. With the aid of a carefully selected and operationalized inventory of organization-set variables, it would be possible to test two general hypotheses of interest to administrative lawyers as well as to organization theorists, to wit:

1. *The structure of an administrative agency (Variables 7 to 17) is a function of the input organization-set variables (1 to 6) and of the output organization-set variables (18 to 21).*
2. *The effectiveness of an administrative agency is a function of its organizational structure (Variables 7 to 17), its input organization-set (Variables 1 to 6), and its output organization-set (Variables 18 to 21).⁶*

RESEARCH STRATEGIES

To test any facet of the foregoing model would obviously require the most efficient methods available. At least four social science methodologies are clearly relevant. The first is the application of the sample survey method such as Blau and his colleagues as well as the Aston group use in conducting quantitative-structural research. This would involve drawing a sample of administrative agencies, mapping the nature of their interactions with their organizational

⁴ For definitions of some of these variables, see Chapters 9 and 10.

⁵ For definitions of some of these variables, see Blau and Schoenherr (1971: 27–29); Heydebrand (1973a: 7–11); Pugh et al. (1968); and Chapter 9.

⁶ Since this chapter was written, I have developed a model of organizational effectiveness. See Chapter 22, this volume. The statistical techniques most appropriate for testing the hypotheses are canonical correlation and multiple regression analysis.

Table 11.2 *Some Illustrative Organization-Set Variables for Studying Administrative Agencies***Input Organization-Set Variables**

1. Type of legislative mandate (broad vs. narrow)
2. Size of input organization-set (i.e., number of organizations)
3. Degree of homogeneity of input organization-set
4. Network configuration of input organization-set (e.g., presence of coalition formation against the focal organization)
5. Degree of adequacy of input resources
6. A composite measure of the degree of organizational autonomy (based on Variables 1 to 5)

Focal Organization Variables

7. Organizational size
8. Organizational age
9. Complexity of task structure
10. Technological complexity
- 11.a. Functional specialization
- 11.b. Degree of boundary role specialization
12. Degree of professionalization of personnel
13. Type of normative reference group orientation of boundary personnel (i.e., focal organization vs. external organization)
14. Centralization of decision making
15. Formalization
16. Departmental specialization
17. Administrative intensity

Output Organization-Set Variables

18. Size of output organization-set
19. Degree of homogeneity of output organization-set
20. Network configuration of output organization-set (e.g., presence of coalition formation against the focal organization)
21. A composite measure of the degree of conflict between the output organization-set and the focal organization (i.e., degree of resistance to regulation, based on Variables 18 to 20)

Output Variables

22. Cost per administrative action
23. Number of administrative actions per professional employee
24. Percentage of administrative actions reviewed by courts per year
25. A composite measure of the degree of organizational effectiveness of the focal organization (based on Variables 22 to 24)

environment, and measuring the effects of their internal structure and the role orientations of their boundary personnel on their legislative, adjudicative, and executive functions.

A second research strategy is that of the case method as exemplified by the outstanding studies of Selznick (1949) and Nonet (1969). Rather than trying to establish quantitative relationships among variables, the focus is on discovering dynamic processes with the help of a given model. Thus, Selznick's use of "cooptation" to throw light on the environmental constraints on the TVA and

Nonet's concept of "legalization" illustrate the potential benefits from this mode of research.

A third and the least exploited research strategy in this context is that of experimental methodology. Organizational experiments pertaining to intraorganizational and interorganizational phenomena can be conducted with the aid of laboratory as well as field studies (Evan, 1971). Thibaut, Walker, and Lind (1972), in the course of testing the relative merits of the adversarial versus the inquisitorial mode of adjudication, have made a case for the use of laboratory experimentation to simulate decision making in courts as well as in administrative agencies:

The laboratory method seems best adapted to studies of institutional modes of conflict resolution since these modes embody standardized rules and procedures that can be experimentally replicated in simplified form. In our society the courts and administrative agencies are of course the principal institutional devices for resolution of social disputes. Thus, the obvious application of the suggested laboratory method entails the simulation of a court or administrative process and the introduction of planned variations of substantive or procedural rules in a way that permits exact measurement of the effects attributable to the variations.

As for field experiments, Schwartz (1961), Campbell (1970), and Zeisel (1973) have advocated the desirability of conducting such research. It does not require a fertile imagination, particularly on the part of some economists who have argued in favor of the deregulation of selected industries, either to perform a "quasi-field experiment," such as Campbell has urged, or, more ambitiously, to seek to persuade relevant administrative agencies to modify in a controlled manner their internal structures or policies—to the extent, of course, that this would not violate the law.

Almost as neglected as experimental methodology in the study of legal phenomena is the use of computer simulation, a technique that is attracting the attention of legal scholars (Sigler, 1968; Merrill and Schrage, 1969; Drobak, 1972). Instead of conducting field experiments, which entail substantial costs and difficulties, to test alternative policies of court administration, law enforcement, administrative adjudication, and the like, it is possible to represent real and hypothetical states of various dimensions of legal systems by means of computer simulation. Although organizational research has thus far made only modest use of simulation models, several studies suggest potentially fruitful applications of this methodology to problems of administrative agencies (Bonini, 1963; Cohen and Cyert, 1965; Rowe, 1968). In fact, the organization-set model outlined above and the 25 illustrative variables operationalizing the model (see Table 11.2) provide the wherewithal for testing an array of functional relationships in a sequence of computer simulation runs.

Although I would obviously not rule out the relevance of conventional legal research, it would be important to select with care a sample of administrative decisions involving *formal adjudication* as well as a sample of decisions involving *informal proceedings*, which, of course, is Davis' principal argument for research on discretionary justice.

CONCLUSION

The burden of this discussion is that the sociology of law can be instrumental in forging a link between administrative law, on the one hand, and organization theory, on the other. If a research partnership were developed between these two disciplines, administrative lawyers would learn how the organizational environments of administrative agencies interact with the internal organizational structures to affect the agencies' legislative, judicial, and executive functions. Organization theorists, on the other hand, in coming to grips with the complex environmental processes impinging on administrative agencies, would significantly advance their knowledge of interorganizational relations and in addition contribute to the integration of organization theory and macrosociological theory, inasmuch as the functioning of any administrative agency invariably entails a complex of legal, political, and economic interactions.

In sum, if the arguments advanced in this chapter were taken seriously by researchers in both disciplines, organization theory would make significant strides, particularly in modeling and explaining interorganizational phenomena; and administrative law would probably evolve more rapidly into Davis' (1971) fourth stage of discretionary justice, which in turn might usher in a fifth stage of "administrative law in action," informed by concepts, propositions, and models derived from organization theory.

Personnel Flows as Interorganizational Relations

In this chapter, another type of interorganizational interaction is explored: personnel flows within a population of organizations. The recruitment of human resources is a universal and recurrent organizational process (Kravetz, 1988). Personnel recruitment decisions have profound consequences for organizations: new members or employees import new bodies of knowledge and skills and are often the source of innovative ideas. In short, such decisions can have significant effects on the performance level of an organization (Etzioni, 1975).

The present chapter reports a study of faculty interchanges among 79 graduate schools of business. Faculty interchange among the schools, the dependent variable, is operationalized in terms of 5 measures, and 11 structural variables are identified as the independent variables. Cluster analysis of a faculty interchange matrix yields 6 supply and 6 receipt clusters, which are analyzed with the aid of the independent variables.

Inbreeding is positively correlated with the tendency toward top-heaviness in faculty rank structure, and 4 other measures of faculty interchange—number of faculty members supplied, number of faculty members supplied as well as received, number of schools interacted with, and number of schools with reciprocal faculty interchanges—are highly correlated with faculty size, growth in faculty size, school prestige, and output of Ph.D.s. The finding that faculty recruitment tends to be guided by structural similarity rather than by structural complementarity raises some questions about the functionality of current recruitment practices.

Organizations are open social systems that necessarily engage in various exchanges with other organizations in their environment (Bertalanffy, 1962; Katz and Kahn, 1966). Although economic theories of the firm have developed concepts about the exchanges of products or services, organization theory has developed few concepts that can explain the processes involved in the exchange of people, information, and influence among organizations.

This exploratory study develops concepts and propositions that help explain the flow of personnel among organizations, specifically the movement of faculty among schools of business (see Chapters 9 and 10, this volume).

FLOW OF PERSONNEL AMONG ORGANIZATIONS

As open social systems pursuing specified goals, organizations must recruit various resources—human, financial, material, and so on—in order to survive and pursue their goals. The recruitment of human resources, a universal and recurrent organizational process, gives rise to the flow of personnel and, concurrently, to a flow of information among organizations, for just as members of a society are carriers of the culture that they transmit consciously and unconsciously to the next generation, so members of an organization are carriers of its subculture, which they transmit to new members (see Chapter 15, this volume). When new members are recruited, particularly in technical or professional occupations, new bodies of knowledge and skills are imported that are often the sources of innovative ideas in organizations (Evan and Black, 1967). Just as organizations operate in particular product or service markets, so they operate in particular labor markets in which personnel are exchanged. In this respect, the goals of an organization are constrained by the labor market, that is, by the kinds of people that it can recruit.

In this exploratory study of personnel flows in schools of business, the focus is on the process of exchange (Homans, 1952; Blau, 1964). If two actors—in this case, organizations—enter into an exchange relationship, it should be possible to identify the nature of the units being exchanged. In the case of the flow of personnel, if a highly prestigious school sends one of its Ph.D.s to a school with relatively low prestige, what does the latter give the prestigious school in return? The less prestigious school is not likely to send its faculty or graduates to the prestigious school. It can, however, express deference and admiration in at least two forms: (1) by endorsing the curricular philosophy and by adapting elements of the curriculum of the prestigious school to its own curriculum; and (2) by sending graduate students to the prestigious school for further training.

In the past few decades, there has been a proliferation of schools of business because of the growing demand in industry and government for specialized managerial training (Gordon and Howell, 1959; Pierson, 1959; McGuire, 1963). Each school, in recruiting a new faculty member, probably considers how the person's training, experience, and status can contribute to its reputation, cur-

riculum, and research program. Among the variables that presumably affect faculty recruitment are the size of the student body, the ratio of students to teachers, the rate of growth of the school, the prestige of the school among schools of business, the geographic location of the school, and so on.

One consequence of the recruitment decision is the network of relationships, including friendships and scholarly connections that develop; that is, each faculty member has a role-set (Gross, Mason, and McEachern, 1958: 48-69; Merton, 1957a: 368-380) that includes relationships with others in the academic community. This network of role relationships is not only a channel for the flow of knowledge but also a source of information about faculty members who might be recruited.

The school of business as a whole can be considered as having a set of relationships with other organizations, that is, an organization-set, of which it is the focal member (see Chapter 9). This organization-set includes not only other schools of business with which it exchanges personnel and conducts joint activities, but also other professional schools, government agencies, industrial organizations, foundations, publishing companies, and so forth. Each business school also has various relations with the members of its organization-set other than those involving the recruiting and supplying of faculty personnel. It may take part in the activities of an association of schools of business or collaborate with other schools in supplying information, for example, to the Educational Testing Service; nevertheless, the flow of personnel is undoubtedly one of the major forms of exchange among schools of business. Recruitment of new faculty therefore affords an opportunity for studying interorganizational relations.

In this study, special attention was devoted to the following five dimensions of the flow of personnel: (1) the number of schools of business with which faculty exchanges occurred; (2) the number of faculty members supplied to other schools of business; (3) the total number of faculty members exchanged, that is, the number exported to and imported from other schools of business; (4) the degree of inbreeding, that is, the number of faculty trained at their school of employment; and (5) the number of schools with reciprocal faculty interchanges.

Another question that received special attention was whether schools recruited faculty from other schools similar or dissimilar to themselves in curricular and other structural respects, that is, whether they were guided by a principle of structural similarity or structural complementarity.

The 11 independent variables, whose effects on the flow of personnel, the dependent variable, were explored in this study, might be characterized, following Lazarsfeld and Menzel (1961), as analytical and global properties of schools of business. Among the analytical variables were faculty size, growth rate of faculty size, student-faculty ratio, and annual number of Ph.D. degrees awarded; among the global variables were age of school, prestige rating of school, type of curricular philosophy, degree to which high-ranking faculty predominated, shape of faculty rank structure, type of support of the university (i.e., public or private), and geographic location.

PROCEDURE

The basic source of the data for this study was the membership directory of the American Association of Collegiate Schools of Business (1960). Only faculty members of professorial rank and only the 79 schools offering graduate business programs (see Table 12.1) were included in the study. Once the data were entered on punch cards, it was possible to generate a faculty interchange matrix of the origins of the faculty in 1960 of each of the schools in the study.

The decision rule for associating a faculty member with a supplying institution was that of the person's last academic affiliation, whether as a student, a research associate, or a faculty member. Thus, a professor on the faculty of MIT who received a Ph.D. at Columbia University, who then worked in industry for some years before joining MIT, was listed as having come from Columbia. Another professor, also a Columbia graduate, who had taught at Cornell before joining MIT, would have been listed as having come from Cornell, and so on. Although this rule is arbitrary, it seemed a better choice than the other most obvious rule—the institution from which the last degree was obtained—since in many cases the professor had been out of school for years before entering the university with which the individual was affiliated in 1960. The rule also avoided our having to classify all the sources from which faculty had been recruited, for example, government, industry, and even retirement. Many schools received at least some of their faculty from business schools outside this population, and indeed, some received most of their faculty from outside this population and from academic departments other than business schools.

The sources of data for the 11 structural variables varied. Some, such as size of faculty, size of student body, age of business school, location, and so on, were readily obtained and did not require subjective judgment; whereas other variables, such as prestige and type of curriculum, did. To develop a rough measure of prestige of the various business schools on a five-point scale, 29 faculty members of business schools throughout the country were asked to rate as many of the 79 schools of which they had some definite knowledge. The value of this limited survey was reassured by the degree to which their ratings were consistent, at least for the more conspicuous schools. Nevertheless, it is appropriate to ask whether 29 other judges would produce ratings at all similar to those obtained.

Assessing the type of curriculum was perhaps the most difficult of all the variables for which data were gathered. Questionnaires were sent to all 79 schools, asking them to describe their educational philosophy, curricular goals, and so on, in a general way, and then to rate the importance of various elements of their curricula—for example, statistics, accounting, psychology, and marketing. The questionnaire responses were supplemented by an examination of the catalogue of each school for both course offerings and general comments on the

Table 12.1 *The 79 Graduate Schools of Business Studied*

1. University of Alabama	41. University of Missouri
2. University of Arizona	42. Montana State
3. University of Arkansas	43. University of Nebraska
4. Boston College	44. New York University
5. Boston University	45. University of North Carolina
6. University of Buffalo	46. University of North Dakota
7. University of California (Berkeley)	47. Northwestern University
8. University of California (Los Angeles)	48. Ohio University
9. Carnegie Institute of Technology	49. Ohio State University
10. University of Chicago	50. University of Oklahoma
11. City College of New York	51. Oklahoma State University
12. University of Colorado	52. University of Oregon
13. Columbia University	53. Pennsylvania State
14. University of Connecticut	54. University of Pennsylvania
15. Cornell University	55. University of Pittsburgh
16. Dartmouth College	56. Rutgers University
17. University of Denver	57. St. Louis University
18. DePaul (Illinois)	58. University of Southern California
19. University of Detroit	59. Southern Methodist
20. Emory University	60. Stanford University
21. University of Florida	61. Syracuse University
22. University of Georgia	62. Temple University
23. Harvard University	63. University of Tennessee
24. University of Illinois	64. University of Texas
25. Indiana University	65. Texas Technical College
26. State University of Iowa	66. University of Toledo
27. University of Kansas	67. Tulane University
28. University of Kentucky	68. University of Tulsa
29. Lehigh University	69. University of Utah
30. Louisiana State	70. University of Virginia
31. Marquette University	71. University of Washington
32. University of Maryland	72. Oregon State College
33. University of Massachusetts	73. University of Minnesota
34. Massachusetts Institute of Technology	74. Washington State
35. University of Miami (Florida)	75. Washington University (St. Louis)
36. Miami University (Ohio)	76. West Virginia University
37. University of Michigan	77. Western Reserve University
38. Michigan State	78. University of Wisconsin
39. University of Mississippi	79. University of Wyoming
40. Mississippi State	

curriculum. Using the information available, each school was then assigned to one of the following curriculum categories:

1. Social science
2. Management science
3. General techniques
4. Special techniques
5. Case studies

Although these categories are not exhaustive or mutually exclusive, they made it possible to differentiate the principal curricular orientation of the schools.

Given the data on the interchange of faculty members and the 11 structural characteristics of the business schools, cluster analysis seemed a promising analytical approach. It does not, like clique analysis, identify a group of members who exchanged only among each other, but it does statistically isolate groups of members with a large number of attributes in common.

The computer program used to perform a cluster analysis was developed by Bonner (1964) and Pettit (1964) of IBM for use in syndrome identification from large amounts of clinical data in which no pattern could otherwise be discerned. The faculty interchange matrix was analyzed for clusters of schools that either received their faculty from significantly similar sources or exported faculty to similar schools. The preliminary results were encouraging and led to the adoption of cluster analysis as the principal analytical tool.

RESULTS

Identification of Clusters

The cluster identification program was applied to the data and yielded several clusters, one of which was selected for detailed analysis—although other sets of results could have been selected based on different assumptions about threshold values and the other program parameters. The clusters chosen for analysis, although overlapping considerably, have the advantage that they included about two-thirds of the schools in the population. Had the clustering program parameters been changed to reduce overlapping, clusters with statistically higher similarity among members might have emerged but with fewer schools represented in them.

Figure 12.1 shows six receipt clusters (*R*), that is, groups of schools that recruited their faculties from significantly similar sources. Figure 12.2 shows six supply clusters, (*S*), that is, schools that supplied faculty personnel to similar schools. The schools are coded from 1 to 79 in the cluster maps; that is, the same numbers used in the list of 79 graduate schools of business presented in Table 12.1.



Both Figures 12.1 and 12.2 show inclusion and overlapping among the clusters. In general, tighter and denser clusters are included within the looser, less dense, and usually larger clusters, which are shared among the two or more of the larger clusters. Complete inclusion and almost complete overlapping do not diminish the statistically unique quality of the tighter cluster itself as identified by the algorithm. The computer results from which the six clusters were drawn included many less definite and less significant clusters, but only these six were chosen, since the larger clusters were so vague as to cast doubt on their distinct identity.

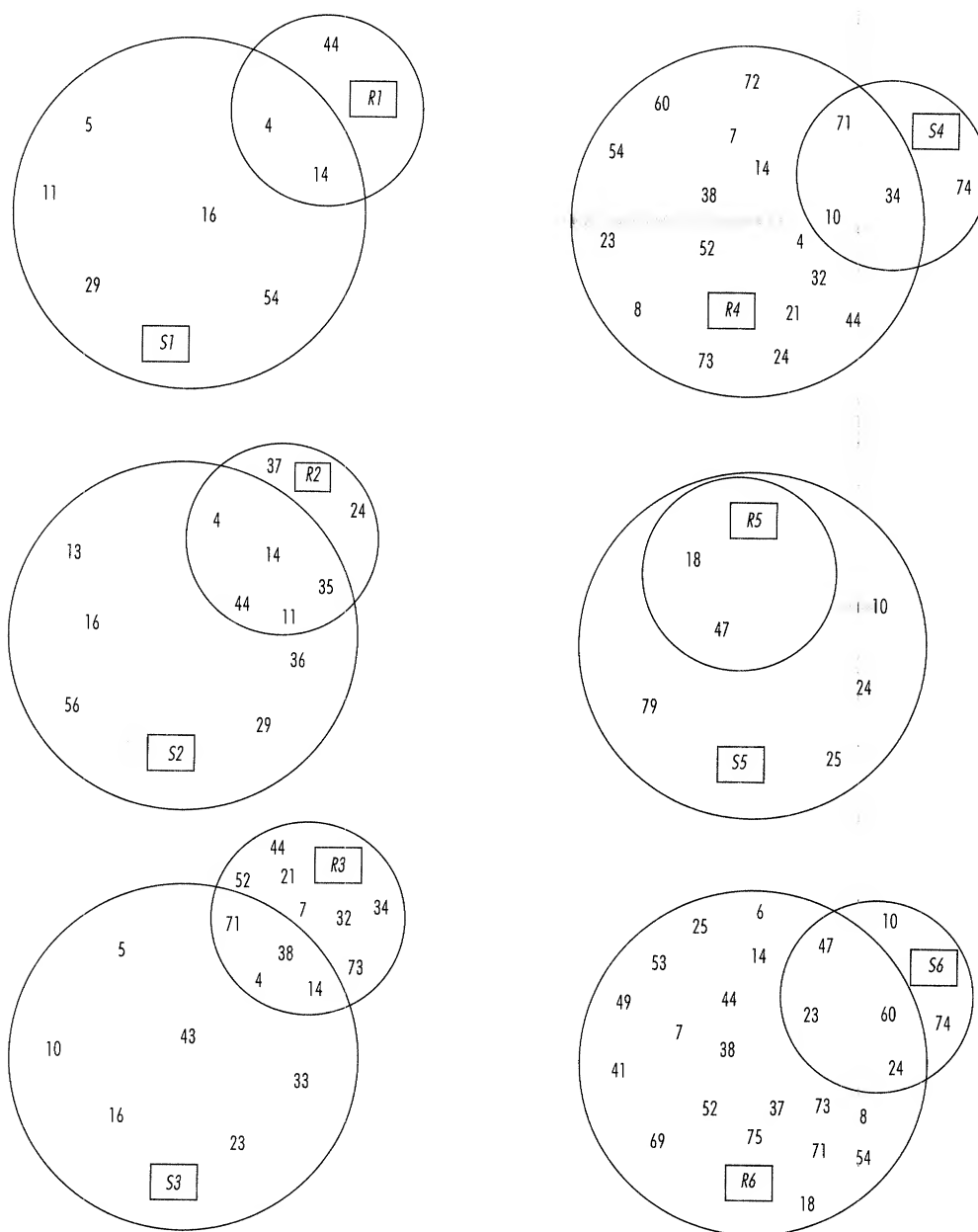


Figure 12.3 Supply-receipt cluster maps.

Analysis of the Clusters

Each receipt and supply cluster was considered in terms of the set of global and analytical variables discussed above. To facilitate the sketch of the profiles, each cluster of schools was examined relative to all the other schools taken as a unit by the student's t test; that is, each receipt and each supply cluster was compared with all the other schools in the sample on each of the variables shown in Table 12.2. Only those t values that reached the significance level of .05 or better were used in the analysis.

A table comparing each receipt cluster with its corresponding supply cluster on the entire array of analytical and global variables is not included because only four of the many t values were statistically significant. The comparisons in the descriptions that follow are with respect to the other schools in the population studied.

Cluster-Pair 1. The 3 members of cluster R1 differed from the other schools in having curricula with less emphasis on management science, special techniques, and case studies; that is, the cluster's main academic emphasis was in the social sciences and general techniques. The members also differed in having an imbalance toward senior faculty and in being located almost exclusively in the New England area.

Cluster S1 shared with R1 the lack of an emphasis on management science, but not the lack of an emphasis on special techniques and case studies; that is, schools in cluster R1 were recruiting their faculty from schools more oriented to special techniques and case studies than they themselves were. Cluster S1 was not overweighted with senior faculty, had significantly more state support, was concentrated in New England, and was less likely to have members in the Western and Southern regions. The principal difference was that the members of cluster S1 were more likely to have state support than members of R1. Although this appeared to be significant when comparing cluster S1 with the rest of the 79 schools, a t test of the supply cluster S1 versus cluster R1 showed no significant differences, indicating that the supply and receipt schools are very similar to each other.

Cluster-Pair 2. The 7 schools of cluster R2 were located principally in New England and were much more likely to be located there than cluster R1. The faculties of this cluster are significantly larger, and the curricula emphasized neither special techniques nor case studies.

The 10 schools of supply cluster S2 were also located predominantly in New England and tended not to emphasize special techniques in its curricula. As in cluster-pair 1, the schools in cluster R2 received their faculty from a population of schools similar to themselves. No significant differences appeared in the intercluster t tests of the clusters R2 and S2.

Cluster-Pair 3. The 11 members of cluster R3 had higher prestige, were less inbred than the average school, and tended not to be located in the Midwestern or Mountain States.

Supply cluster S3 did not differ from the rest of the population except that it supplied more faculty to cluster R3; and as in the case of cluster-pairs 1 and 2, the supply and receipt clusters were very similar in all respects.

Cluster-Pair 4. The second largest receipt cluster, R4, with 18 members, had a significantly higher mean prestige score, graduated far more Ph.D.s, and had a larger and more rapidly growing faculty than that of the other schools. Furthermore, its members supplied and received many more faculty and interacted with more schools. None of the schools in this cluster was in the Deep South.

Supply cluster S4, with only 4 members, had high prestige, significantly fewer members in the Southeast, the Deep South, or the Mountain States, significantly less emphasis on general techniques curricula, and neither top-heavy nor bottom-heavy faculty rank structures.

Cluster R4 was more like other schools in having a less symmetrical faculty structure, whereas S4 was more symmetrical in its faculty structure, suggesting that its members recruited about an even number of people of various age categories. This does not reflect a school with a high growth rate in which more younger faculty are recruited than middle-aged or older faculty, in contrast to R4, which, as Table 12.2 shows, has a higher rate of growth.

Cluster-Pair 5. The 2 members of cluster R5, the smallest cluster, were both located in the Midwest and were significantly older schools, stressing two curriculum types: special techniques and case studies. It tended to be significantly less symmetrical in faculty rank structure than the other schools.

The 6 members of supply cluster S5, while not as old as the members of R5, did complement their curriculum type, having significantly fewer general techniques curricula. Cluster S5 also supplied many more faculty members and was strongly represented in the Midwest. While both clusters R5 and S5 were well defined, they have too few members to justify generalizations on averages of various variables.

Cluster-Pair 6. Cluster R6, with 22 members, the largest cluster in this study, differed significantly in receiving a higher proportion of its faculty from outside the population of schools and in having almost all its members located in the Midwest.

Cluster S6, with only 6 members, differed from the population of schools in more ways than any other cluster. The S6 schools had much higher prestige, much larger faculty, more of their own graduates on their faculty, fewer curricula in general techniques and special techniques, and more in case studies. They were less likely to have very few faculty members in the associate professor rank, had more supply and receipt transactions, and interacted with more different schools. Cluster S6 seemed to have great geographical dispersion, as inferred from the lack of significant positive *t* values for any region; with members in New England, the Mid-Atlantic states, and the Southeastern states. Cluster S6,

Table 12.2 *Some Factors Distinguishing Receipt and Supply Clusters from Remainder of the Population of Schools of Business*

Variables	Clusters				
	R1	S1	R2	S2	R3
Analytical					
Faculty size			.05 + ^a		
Faculty growth rate					
Student-faculty ratio					
Number Ph.D.s awarded, 1960					
Global					
Age of school					
Prestige rating of school					.05 +
Degree of top-heaviness in faculty rank structure					
Shape of faculty rank structure					
1. Top-heavy	.001 — ^b	.05 —			
2. Symmetrical					
3. Bottom-heavy					
Support of university					
1. Public		.05 +			
2. Private		.05 —			
Type of curricular philosophy					
1. Social science					
2. Management science	.01 —	.001 —			
3. General techniques					
4. Special techniques	.001 —		.001 —	.001 —	
5. Case studies	.001 —		.001 —		
Geographic location					
1. New England	.05 +	.001 +	.05 +	.01 +	
2. Mid-Atlantic			.01 —		
3. Midwest		.001 —		.05 —	.05 —
4. Southeast		.05 —			
5. Deep South		.05 —	.05 —	.05 —	
6. Southwest and Mountain States		.001 —	.001 —	.01 —	.001 —
7. Far West			.001 —	.001 —	

^a + means greater than the sample mean on a given variable.

^b — means smaller than the sample mean on a given variable.

like cluster S4, appeared to be a high prestige group and had a larger faculty than most other schools. This probably explains in part why so small a cluster is such a significant factor in supplying members to a large and rather average group of institutions such as cluster R6. These 6 schools did not emphasize

Table 12.2 *Some Factors Distinguishing Receipt and Supply Clusters from Remainder of the Population of Schools of Business (Continued)*

Clusters						
S3	R4	S4	R5	S5	R6	S6
	.001 +					.05 +
	.001 +					
	.05 +					
	.001 +		.001 +			.01 +
		.001 -				
		.001 +	.001 -			
		.001 -				.001 -
			.001 -			
			.01 -			
		.001 -	.001 -	.001 -		.001 -
						.001 -
						.05 +
				.001 -		
				.01 -		
			.001 +	.001 +	.05 +	.01 -
		.05 -		.05 -		
.05 -		.05 -		.05 -		.05 -
		.01 -		.01 -		.05 -
						.01 -

general techniques and special techniques. They emphasized well-defined academic disciplines rather than general professional training. Thus, one can infer that the social sciences, management sciences, and specific case studies receive considerable emphasis in the S6 schools. Cluster S6 differs from R6 in recruiting

a higher proportion of its faculty from schools outside the population and in fewer curricula emphasizing general techniques. This comparison between the supply cluster and the receipt cluster differs from the previous comparisons in that there seems to be a strong difference in the curricular philosophy between this pair of clusters.

If the concept of structural complementarity would serve any useful function in explaining faculty interchange, it would be with respect to curricula, so that it is surprising to find that schools tend to recruit faculty from schools similar to themselves. One possible explanation is that the role-set relationships of faculty members outside a given school are probably affected largely by associations one develops in the course of graduate school training and participation in professional societies. If faculty members tend to associate with colleagues at schools that are similar to their own, they in turn tend to influence the recruitment process by hiring faculty members or graduate students from those schools. This results in an interchange of personnel among fairly similar schools with respect to curricular philosophy and other structural characteristics. This type of recruitment inadvertently leads to more homogeneity than may in fact be functional for the schools involved. If a faculty diverse in expertise and orientation to teaching and research is a desirable prerequisite for the growth of a professional school, a pattern of recruitment from schools similar to one's own is not likely to promote such diversity and heterogeneity among faculty members. Hence, if the premise is correct that diversity and heterogeneity among faculty members are desiderata for the vitality of a professional school (Simon, 1967), the absence of structural complementarity in the data may well point to a significant failing in the faculty recruitment practices of many schools of business.

Correlates of Measures of Faculty Interchange

In the foregoing discussion, the unit of analysis has been the school cluster. Receipt clusters have been distinguished from supply clusters and each from the rest of the population of schools. A shift from an analysis of a cluster of schools to an analysis of individual schools will be made in an effort to throw additional light on the factors that affect the flow of personnel among these schools. In this analysis, all of the schools in the aggregate, that is, all 79 schools, shall be considered for the purpose of ascertaining which independent variables are correlated with the five measures of faculty interchange: (1) inbreeding, a measure of negative interaction among schools; (2) the number of faculty supplied (S), a measure of a one-sided tendency to interact with other schools; (3) the total number of faculty supplied and received ($S + R$), a measure of the tendency of a school to interact with other schools; (4) the number of schools *qua* schools interacted with, which is a measure of the size of a school's organization-set; and (5) the number of schools with reciprocal faculty interchanges. Table 12.3 shows some of the correlates of these five measures of faculty interchange.

The inbreeding index was positively correlated with the degree of top-heaviness in faculty structure and a curriculum emphasizing special techniques. Although these correlations are rather small and account for a small amount of variance, they are nevertheless suggestive. A top-heavy faculty may have a high proportion of people who have not explored new theories and new methodologies in their research or in their teaching. Consequently, the Ph.D.s. graduating from such schools are not likely to find their way into the outstanding schools of business. Likewise, a curriculum emphasizing special techniques is likely to be highly traditional and lacking in any underlying theoretical character. In short, faculty inbreeding tends to weaken a school's capacity either to attract students or to produce faculty members for other schools.

The index of supply, that is, the tendency to supply faculty to other schools, is positively correlated with the number of Ph.D.s produced, the degree of prestige, faculty size, faculty growth rate, student-faculty ratio, and age of the school. Schools that are old, large in faculty, high in student-faculty ratio, fast growing, prestigious, and prolific in producing Ph.D.s are more likely to supply faculty to other schools than those lacking these characteristics.

The interchange measure, $S + R$, that is, the total number of faculty supplied and received, has a similar set of correlates as in the case of the supply

Table 12.3 *Correlates of Measures of Faculty Interchange **

<i>Correlates</i>	<i>Percent of Inbreeding</i>	<i>Number of Faculty Supplied</i>	<i>Number of Faculty Supplied and Received</i>	<i>Number of Schools Interacted with</i>	<i>Number of Schools with Reciprocal Faculty Interchanges</i>
Prestige rating of school		.5135	.5054	.4463	.4291
Age of school		.1819	.1555	.1666	
Number of Ph.D.s		.5245	.5191	.5211	.5183
Faculty size		.4793	.6830	.5837	.5904
Faculty growth rate		.2810	.3393	.3337	.3506
Student-faculty ratio		.2332	.1703		
Type of curricular philosophy					
Special techniques	.1869			-.1955	
Shape of faculty rank					
Top-heavy	.1514			.2105	
Bottom-heavy				-.1954	
Geographic location					
Midwest			.1807	.1963	
Southwestern and Mountain States					-.2401

* Kendall tau; level of significance (2-tail) = .05

measure, with a high positive correlation between $S + R$ and the number of Ph.D.s produced, degree of prestige, growth of faculty, student-faculty ratio, and age of the school. Among the additions to this list of correlates of $S + R$ is the tendency for schools to be located in the Middle West and a negative correlation with curricula emphasizing special techniques.

A similar roster of positive correlations turns up in connection with the measure of the number of schools interacted with: older schools with larger faculties, with a large number of Ph.D.s produced, with high prestige, and a high faculty growth rate were more likely to interact with other schools of business. There was also a correlation with a top-heavy faculty structure. This finding tends to conflict with the earlier one regarding inbreeding. There a positive correlation was observed between inbreeding and top-heaviness, whereas here a positive correlation was found between the number of schools interacted with and the tendency to top-heaviness in faculty structure. One explanation of this finding involves distinguishing between schools with outstandingly productive full professors whose work makes them highly visible in the academic community, and those in which older full professors have not established themselves in the academic community, and hence neither they nor their schools profit from their senior status.

One of the negative correlations with the number of schools interacted with is by now familiar, namely, the type of curriculum emphasizing special techniques. The only new negative correlation is bottom-heavy faculty structure characterized by a few associate professors and a predominance of either instructors and/or assistant professors. It is not clear why schools with a bottom-heavy faculty rank structure should be negatively correlated with the number of schools interacted with. Such a structure may reflect unusual insecurity among assistant professors caught in a rotating junior staff.

The measure of reciprocal relationships with other schools again yields high correlations with faculty size, Ph.D. output, prestige, and faculty growth rate. In addition, there is a negative correlation with location in the Mountain States.

Table 12.3 suggests that, except for the measure of inbreeding, four of the measures of faculty interchange have a similar pattern of correlations with the variables that might affect the process: faculty size, number of Ph.D.s produced, age of the school, prestige, and faculty growth rate.

CONCLUSION

Interorganizational relations involve a variety of complex processes, one of which is an exchange of personnel. Organizations import and export members in the course of pursuing their objectives. An analysis of this facet of interorganizational relations was the purpose of this chapter. As a case in point, the flow of faculty members among 79 schools of business was studied. With the aid of a cluster analysis computer program, six receipt (R) and six supply (S) clusters were identified.

Of the supply-receipt cluster pairs, the following summary statements may be made:

1. *R1* and *S1* were distinguished primarily by a lack of certain curriculum types and by a strong regional concentration.
2. *R2* had unusually large faculties and a fairly regional concentration, whereas *S2* faculty sizes were average and the regional concentration stronger.
3. *R3* was distinguished principally by high prestige, with no regional tendencies to speak of; the members of *S3*, the faculty sources of these high prestige schools, were not significantly distinct from the other schools in the population.
4. *R4* was distinguished by high prestige, Ph.D. output, faculty size, interaction with other schools, and faculty growth rate; *S4* also had high prestige and symmetrical faculty structure, but few of the merits of *R4*.
5. *R5* consisted of principally older schools in the Midwest, recruiting faculty from Midwestern private schools.
6. *R6* was centered in the Midwest, but recruited faculty from schools distinguished by high prestige and large faculty size, but no pronounced regionality. Here, the receipt and supply clusters can be said to be highly complementary.

On the whole however, there is scant evidence for complementary relationships among the clusters; in other words, receipt and supply clusters are not very different from one another.

A correlational analysis of the five measures of faculty interchange showed that inbreeding was positively correlated with top-heaviness in faculty rank structure. The other four interchange measures—the number of faculty members supplied to other schools, the total number of faculty members exchanged, number of reciprocal exchange relationships, number of schools interacted with—were correlated to a high degree with several common variables: faculty size, prestige, Ph.D. output, and growth in faculty size.

Although 11 independent variables were included in the analysis of the data, it is conceivable that some crucial variables were omitted, for example, the number of faculty publications per year, the presence or absence of a graduate school journal, and the tested scholastic ability of the graduate students admitted by a school. The number of faculty publications and a graduate school journal would add to the visibility of a school, and a high level of scholastic ability of graduate students would increase the probability of producing high-caliber Ph.D.s and attracting a high-caliber faculty.

Two other methodological and substantive questions should be noted. First, there is a need for a longitudinal analysis of all variables. In the present study, one such variable was examined, the growth rate of the faculty. Similarly, the growth rate of the student body, the growth rate of the Ph.D. program, and

changes over time in prestige and other such derivative variables could well be examined. The dynamic growth of many organizations underscores the importance of growth-rate variables.

Second, the flow of personnel as a phenomenon of interorganizational relations reflects, among other things, a recruitment decision by organizational decision makers. The recruitment decision is guided implicitly or explicitly by one or more reference organizations (see Chapter 9; Riesman, 1956: 11–37, 70–71). If an analysis of the flow of personnel among schools of business indicates that the recruitment policies of the reference organizations of a school of business are significantly different from those perceived, such a school cannot modify its position in the community of schools of business unless it changes its recruitment policies.

The methodology employed in this chapter for studying the flow of personnel among organizations may, with modifications, be applied to all classes of organizations. An extension of such research would contribute to the emergence of models for analyzing personnel flows—a relatively neglected and complex problem in organization theory.

Interhospital Relations

In Chapter 13, we focus on a population of hospitals as a context for studying interorganizational networks. For the past two decades, nonprofit community hospitals have encountered increasing problems of scarcity of resources due to the mounting costs of medical technology; competition for patients, physicians, and research grants; and increasing efforts at regulation by state and federal agencies. To cope with this complex array of problems, multi-hospital systems and other types of interhospital linkages have been designed to pool scarce resources and coordinate health care services in a more cost-efficient manner (Lehman, 1975; Brown and Lewis, 1976; Mason, 1979).

In this chapter we revise and extend Chandler's (1962) thesis of strategy and structure and in the process we develop a recursive model of strategy, structure, and performance. Interviews, organizational documents, and administratively collected data were examined to determine the extent to which strategy, structure, and performance are linked in four different types of interorganizational structures known as multihospital systems: a consortium, a joint venture, a merger, and a corporate management system.

Using Kendall's statistical measure of concordance, strategy and structure are found to be closely related; and strategy, structure, and performance are found to be generally interrelated in the four multihospital systems considered. While the relationship of strategy and structure is not one-to-one, as it is in the industrial organizations considered by Chandler, the significant association found between one measure of strategy, structure, and performance indicates that the multihospital systems examined are able to link their strategy and structure effectively to performance. By systematically exploring the interrelationship of strategy, structure, and performance in a variety of organizational contexts, organizational researchers will very likely increase their understanding of how organizations are interrelated with their environments.

In the burgeoning field of interorganizational relations (Evan, 1976a,b; Pfeffer and Salancik, 1978; Aldrich, 1979), two ideal-typical, or archetypal perspectives recur in an effort to throw light on the relationship between organizations and their environments, which often means organizations and other organizations. This interorganizational pair of models is the natural selection or environmental determinism versus resource dependence (Aldrich and Pfeffer, 1976). According to environmental determinists, the structural attributes of a population of organizations—not a single organization—are a function of the constellation of environmental or ecological characteristics. On the other hand, the resource dependence perspective suggests that organizational decision makers hold the key to an organization's fate by their choices and actions that affect the acquisition of essential resources. An analogous pair of models was set forth by Gouldner (1959) in a well-known paper in which he contrasts a rational model of organizations with a natural system model of organizations. A kindred distinction was developed by Simon (1969: 1–22) who analyzes the differences between knowledge of natural systems versus knowledge of artificial systems.

As with any ideal type, archetype, or model, applying it to a body of empirical phenomena entails the use of an “auxiliary theory” (Blalock, 1968) to adapt it to observed data. As regards the antinomy between environmental determinism and resource dependency, it is reasonable to assume that a dialectical interplay occurs in real world organizations. From this vantage point, contingency theory may be interpreted as an effort to explain the interaction between the organizational design decisions of managers and a variety of environmental constraints (Evan, 1976b: 262). Contingency theory posits that there is a “goodness of fit” between an organization's environment and its strategy and structure that is reflected in the performance level of the organization.

The purpose of this chapter is to explore some of these organization-environment relations from an interorganizational perspective with reference to the hospital industry in the United States. In particular, we have inquired into the emergence of four distinct interorganizational, interhospital structures: a consortium, a joint venture, a merger, and a corporate management system. How do these interorganizational structures differ in strategy? And in view of the contingency theory prediction, do they differ in performance? Before addressing these questions, we turn first to a consideration of several salient features of the American hospital industry environment and then to an articulation of the theoretical relationships among the concepts of strategy, structure, and performance.

SOME OBSERVATIONS ON INTERHOSPITAL RELATIONS IN THE UNITED STATES

Rather than operating in a competitive market such that prices for health services are a function of the relationship between supply and demand and hence of benefit to the consumers, hospitals constitute a substantially regulated industry.

Many federal, state, and local laws specifically affect the operation of hospitals, relating to building and safety codes, capital improvements, utilization of hospital facilities, and reimbursement for services rendered to elderly and indigent patients.

To cope with an unstable environment due to competition among hospitals, uncertainty about future government regulation, and rapidly advancing medical technology, hospitals in the past have tended to join local, state, and national trade associations to obtain specific services, including collective bargaining representation with private hospital insurance companies, such as Blue Cross, and political representation in state and federal legislatures to protect member hospitals from adverse forms of government regulation. In addition, in the past decade or so, possibly because of an intensification in the level of environmental uncertainty and threat, hospitals have begun to experiment with new interorganizational cooperative arrangements. These interorganizational innovations have taken a variety of forms and have come to be known as "multihospital systems" (Brown and Lewis, 1976; Portnoy, 1977). A 1975 survey conducted by the American Hospital Association found that 307 multihospital systems were in existence, not counting those operating within a framework of a local, state, or federal government agency. These systems collectively had over 289,000 beds, or approximately 20 percent of the bed capacity in the United States.

Although no data have been assembled detailing the distribution of different types of interorganizational structures among the population of 307 multihospital systems, it is not unreasonable to expect that the four types we have selected for inquiry—a consortium, a joint venture, a merger, and a corporate management system—are prominent among them.

In a consortium, two or more hospitals join in a legal compact to accomplish one or more objectives while preserving their respective organizational identities. In a joint venture, two or more hospitals enter into a legal agreement whereby they jointly establish, operate, and control a separate health care facility while maintaining their own individual organizational identities. Unlike a consortium and a joint venture, a merger entails the legal fusion of two or more hospitals into a new organizational identity. The premerger organizations are christened as subunits within the new organization; typically, in the case of corporate mergers, a previous organization is reborn as a new division. The fourth type of interorganizational structure, a corporate management system, consists of two or more hospitals organized and operated for profit, a purpose that distinguishes this mode of organization from the other three types of multihospital systems. A recent survey established that 1,060 investor-owned hospitals are managed by "hospital chains," or about 14 percent of the population of hospitals in the United States (Springate and McNeil, 1977). These hospitals tend to have considerably fewer beds than voluntary hospitals, the mean for the proprietary being 79.3 beds and for the voluntary, 178.7 beds (Rafferty and Schweitzer, 1974: 305).

To repeat, we are not asserting that these four modes of interorganizational structure exhaust the variety of multihospital systems that are emerging as a

means of coping with mounting environmental uncertainties. We have selected one hospital system from each of the four types on the assumption that they constitute progressive stages of functional coordination and integration. In other words, a consortium is more functionally specific and makes fewer demands on interorganizational integration than a joint venture; a merger represents a significantly higher level of functional integration than either a consortium or a joint venture; and a corporate management system, because of its profit orientation, requires a still higher level of functional integration. To explore this assumption, we undertook four case studies of multihospital systems to examine the interrelationship among strategy, structure, and performance at the interorganizational level.

A STRATEGY, STRUCTURE, AND PERFORMANCE MODEL

In his well-known study of the historical transformation of four large corporations—GM, DuPont, Sears and Roebuck, and Standard Oil of New Jersey—Chandler (1962) formulates his pivotal concepts of strategy and structure. Although he does not link these concepts explicitly with performance, it is clear throughout his study that as these huge corporations resorted to the strategy of diversification and subsequently introduced a multidivisional structure, they succeeded in more efficiently and profitably using their resources. At least one organizational researcher (Rumelt, 1974) who has used Chandler's work as a point of departure has explicitly investigated the interrelationship among strategy, structure, and performance.

Notwithstanding Chandler's (1962: 16) arresting thesis that "structure follows strategy and that the most complex type of structure is the result of the concatenation of several basic strategies," the meaning of this pair of concepts warrants attention. Some clarification is essential if the concepts, developed in single industrial organizations, are to be extended to a nonindustrial interorganizational context such as hospitals.

Of the two concepts, structure is relatively free of ambiguity. It is, according to Chandler (1962: 16),

the design of organization through which the enterprise is administered. This design, whether formally or informally defined, has two aspects. It includes, first, the lines of authority and communication between the different administrative offices and officers and, second, the information and data that flow through these lines of communication and authority.

This definition is reasonably clear and resonates with the Weberian conceptualization of structure as reflected in the research of Pugh and colleagues (1963, 1969), Blau and Schoenherr (1971), and others. By contrast, Chandler's (1962:

16) definition of strategy is problematic:

Strategy can be defined as the determination of the basic long-term goals and objectives of an enterprise, and the adoption of courses of action and the allocation of resources necessary for carrying out these goals.

It is evident from this definition that strategy is not a unitary concept. In effect, it includes three concepts: determination of goals, adoption of means, and allocation of resources. If the goal of a corporation is expansion or growth, the means chosen to achieve this goal may include vertical integration, product diversification, geographical expansion, or the like. Whatever means are chosen, it will be necessary to allocate appropriate resources to achieve the desired goal.

It is also reasonable to expect that the selection of a given strategy by decision makers is a function of a set of environmental forces. As Chandler (1962: 18) puts it,

changes in strategy . . . appear to have been in response to the opportunities and needs created by changing population and changing national income and by technological innovation.

In this formulation, Chandler, in effect, achieves a dialectical resolution between the two contrasting models of organizations and environments mentioned earlier in the chapter: the natural selection model and the resource dependence model. We may summarize Chandler's general thesis in the schematic diagram presented in Figure 13.1.

In contrast to the environment conceptualized by Chandler, the changing environment of American hospitals is a blend of opportunities, needs, and threats. The demand for health care is rising as the level of awareness of health care among consumers increases. Along with the rising demand for hospital services has come the growing threat of malpractice suits, the occurrence of which contributes to increases in hospital costs and physicians' insurance premiums that are, in turn, passed on to patients in higher fees. At the same time, ongoing medical research results in rapidly advancing medical technology that further adds to the rising costs of hospital services; however, it also creates opportunities for changing the strategy and structure of hospitals. The courts, in

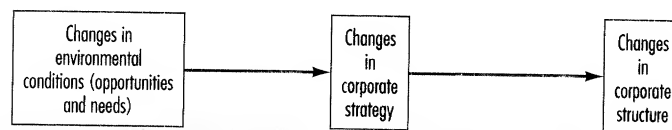


Figure 13.1 Chandler's model of strategy and structure.

resolving malpractice cases, have linked appropriateness of medical care with the use of available medical technology, thereby encouraging hospitals to seek whatever technological advances the marketplace offers. Uncertainty about the pace and exact nature of regulation implementation has added additional degrees of uncertainty for hospital managers. Each of these environmentally induced changes calls for levels of organizational expertise and interorganizational coordination that were rarely needed a decade ago. Given the complexity and degree of change involved in these situations, hospitals have often responded collaboratively.

Given the opportunities, needs, and threats forming the environments of American hospitals, the emergence of various forms of multihospital systems may be viewed as an adaptive response by hospitals to rationalize their resources and operations in the interest of extending the scope of *self-regulation* to ward off the spectre of further *government regulation*. Implied in the willingness to join a multihospital system is the acknowledgment that the traditional strategy of organizational autonomy is dysfunctional and needs to be replaced with a strategy of interhospital cooperation and coordination. Since interhospital coordination is a matter of degree, and hospital environments vary, adopting a new interorganizational strategy does not bring in its train a single interhospital structure, as witness the four types—a consortium, a joint venture, a merger, and a corporate management system—we are investigating in this study. Nor is there reason to suppose that combining different types of interhospital strategies with various types of interhospital structures will result in similar levels of performance.

Given this adaptation of Chandler's thesis regarding strategy and structure to the American hospital system, we present a recursive model in Figure 13.2.

In our conceptualization of performance, an application is made of Evan's model of organizational effectiveness (see Chapter 22 in this volume), which rests on a systems perspective of organizations. In its interaction with the environment, an organization activates at least four systemic processes: (1) inputs, *I*; (2) transformations of input resources, *T*; (3) outputs, *O*; and (4) feedback effects. These systemic processes suggest a multidimensional conceptualization of organizational effectiveness, namely, "the capacity of an organization to

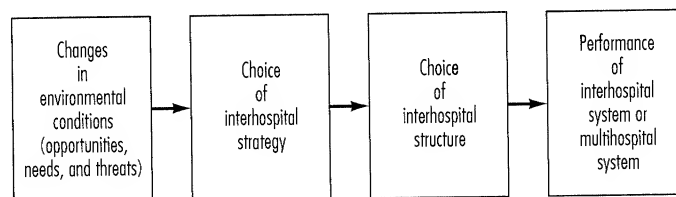


Figure 13.2 A model of the strategy, structure, and performance of multihospital systems.

cope with all four systemic processes relative to its goal-seeking behavior—however explicit or implicit this may be” (see Chapter 22). Operationalizing these four processes in terms of systemic interrelations yields three static ratios of organizational effectiveness (O/I , T/I , and T/O) and six dynamic ratios ($\Delta I/I$, $\Delta T/T$, $\Delta O/O$, $\Delta O/I$, $\Delta T/I$, and $\Delta T/O$). In principle, these organizational effectiveness ratios are applicable to all types of organizations.

SOURCES OF DATA

We began our collection of data with unstructured interviews of key informants, such as hospital administrators, chiefs of medical staffs, and controllers. A second source of data is organizational documents, including organizational charts, annual reports, articles of incorporation, bylaws, and information releases. Because of the difficulty hospital administrative personnel have in retrieving statistical information that hospitals do not traditionally collect, we have resorted to a secondary analysis of data originally gathered for administrative purposes by the American Hospital Association in their annual surveys (American Hospital Association, 1954, 1960, 1965–1971).

In measuring interorganizational strategy and structure, we have not relied on the simple aggregation of the strategies and structures of the individual constituent hospitals that comprise the four interorganizational types under consideration. Rather, we have considered the interorganizational clusters as something above and beyond their constituent members (Lazarsfeld and Menzel, 1961). Therefore, to measure the strategies and structures of the multihospital systems, we have used perceptions based on our interviews, organizational documents, and administratively collected data. To measure performance, we have relied primarily on administratively collected data. The quality of hospital performance has been conceptualized as including “structure quality,” “process quality,” and “outcome quality” dimensions (Donabedian, 1966, 1968, 1978). At present, there is no agreement as to which of the three dimensions is a more appropriate measure of quality, as each has supporters and detractors. Since a number of social scientists (Neuhauser and Anderson, 1972; Heydebrand, 1973a; Scott, Forrest, and Brown, 1976; Shortell, Becker, and Neuhauser, 1976) and the accreditation agencies have based assessments of hospital performance on structure quality indicators, we have chosen to follow in the same tradition, while acknowledging that this is not the only conceptualization of hospital performance available.

Given the exploratory nature of this study, we are interested in defining and investigating variables pertaining to strategy, structure, and performance of the four exemplar types of interorganizational systems rather than developing and testing specific hypotheses.

RESULTS

Emergence of the Four Multihospital Systems

The hospitals examined in this study enjoyed an independent existence ranging from less than 1 to nearly 15 decades prior to joining a multihospital system. Their decision to relinquish a measure of their organizational autonomy by joining a multihospital system can be related, in each case, to a significant change in the environment.

The Consortium. For the consortium, the triggering mechanism was a shift in the regional hospital balance of power, stimulated by a state planning and a legislative decision. In the early 1960s, the state in which the consortium is located decided to establish a medical school, and a decade later the state legislature formed a cost commission to regulate the budgets of hospitals in the state.

The Joint Venture. The joint venture developed in the mid-1960s out of a need for three community hospitals to expand and modernize in response to growing community health care requirements. Despite agreement at the board level to merge two of the hospitals, the future direction of the hospitals was somehow reinterpreted at the management level, and the board-inspired agreement broke down amid charges that one of the boards had betrayed its mission to its hospital. As a compromise, a joint venture hospital was built whose board included equal numbers of members from each of the two original boards.

The Merger. The merger evolved when the goals of three hospitals and the local business community converged. The interests of each party, respectively, in establishing a teaching medical center and in rationalizing hospital services by eliminating duplication and triplication came together amid a variety of cost pressures.

The Corporate Management System. Of the multihospital system responses considered in this chapter, the investor-owned hospital chain, or the corporate management system, is unique in responding to opportunities in its environment. The history of the system since its founding in 1968 is one of meteoric growth, and currently the system owns 35 hospitals and contract manages another 18.

Strategy of Multihospital Systems

Assessing the strategy of multihospital systems in terms of Chandler's model of strategy and structure becomes problematic because his conception of environmental "opportunities and needs" as generating new strategies is not as

applicable to the three nonprofit hospital systems under consideration as it is to the corporate management system. For the consortium, the joint venture, and the merger, threats were important features of the environment that stimulated the multihospital system response. It is also evident that Chandler's concept of strategy, which presupposes organizational growth, is not as crucial to the three nonprofit systems as it is to the corporate management system. If hospitals are not primarily pursuing a strategy of growth and responding to "opportunities and needs," they are, we suggest, following a course of service and facility improvement within a framework of organizational autonomy as their primary strategy. In other words, hospitals strive to become more effective by changing the scope of their facilities and by upgrading the level of expertise of their personnel. The ideal hospital presumably is one that can handle any and all health care problems of its patients. Hospital strategy thus involves creating the optimal blend of facilities and personnel within the constraints defined by the organization's available resources and environment.

We have measured strategy by means of two types of indicators: availability of complex medical technology in the multihospital system (Mahajan and Schoeman, 1977), and an assessment of the system goals of patient care, education, and research with the aid of a content analysis—based on a word frequency count—of each system's articles of incorporation and bylaws (Holsti, 1969). These two types of indicators reflect, respectively, the "operative" and "official" goals of the multihospital system (Perrow, 1963).

On the surface, one would expect the official goals of the multihospital system—those goals and purposes espoused in the system's articles of incorporation and bylaws—to reflect differences in strategy. However, there is a tendency for the lawyers who draft such documents to impose a homogeneous structure, regardless of individual nuances distinguishing the strategies of the systems involved. To some degree, as shown in Table 13.1, we have found this to be

Table 13.1 Frequency of Mention and Rank Order of Strategy-Related Terms in the Articles of Incorporation and Bylaws of the Multihospital Systems.^a

System	Content Analysis Categories					
	Patient Care	Rank Order	Education	Rank Order	Research	Rank Order
Consortium	3	2	4	3	2	2
Joint venture	12	4	2	1	2	2
Merger	4	3	10	4	3	4
Corporate management system	2	1	3	2	0	1

^a Kendall $W = .55$, not significant at .05.

the case. However, despite the relative similarity between the goal-formulation documents, some clear differences do emerge. The joint venture is the system most concerned with patient care, and the merger appears to be the system most concerned with education. These results are consonant with our qualitative assessments, although the relative "distance" between the rankings for patient care—mentioned 4 times in the merger's documents (ranked third) and 12 times in the joint venture's documents (ranked fourth)—is not indicative of the service actually offered. Similarly, the distance between the consortium (ranked third in education with a word count frequency of 4) and the merger (ranked fourth with a word count frequency of 10) is not an accurate reflection of the actual education programs in existence. Thus, for patient care and education, the rankings appear appropriate, but the actual scores are somewhat distorted by the nature of the legal documents.

The system goal of research is more difficult to interpret. The corporate system appropriately omits any reference in its documents to research. Among the other systems, the word "research" is used to mean different things. Clinical and laboratory research is being conducted only in the consortium, while some drug testing research is being done in the joint venture and merger. Thus, judging from our interview data, the frequency scores for research in Table 13.1 and the rankings of the systems are partially distorted. In the case of the merger, which calls itself a "medical center," its high ranking on research more accurately reflects its aspirations than its accomplishments.

As suggested by Perrow (1963), the official goals of the hospital systems are not necessarily congruent with the operative goals. In fact, one may be pursued at the expense of the other. In measuring the operative goals, we have used the availability of complex medical technology to indicate the extent to which the systems are realizing their medical care potential. While mere possession of complex medical technology is no indication of its frequency of use, it does show the relative commitment of the systems to invest in service-related equipment. Not surprisingly, the corporate system, as we see in Table 13.2, has the lowest percentage of complex medical technology available, a finding that lends credence to the notion that investor-owned hospitals operate with a more restricted case mix and leave complicated health care problems—which require more costly equipment and more specialized personnel—to other hospitals (Ruchlin, Pointer, and Cannedy, 1973, 1974; Rafferty and Schweitzer, 1974). Rather surprisingly, the merger, the second largest of the nonprofit systems, has the next lowest percentage of complex medical technology. The high standing of the joint venture was not anticipated because of its proximity to a metropolitan area with a large complex of medical facilities.

Several of the operative goals are better explained when they are compared to the official goals. Assuming that none of the systems has unlimited resources, it follows that those highly ranked in one area are not likely to be highly ranked in all areas. Thus, the merger, with its high commitment to education, may to

Table 13.2 *Percentage and Rank Order of Complex Technology Indicators^a of the Multihospital Systems in 1976*

<i>System</i>	<i>Percent</i>	<i>Rank Order</i>
Consortium	87.5	2
Joint venture	87.5	1
Merger	62.5	3
Corporate management system	25.0	4

^a Rated in descending order of complexity by 10 knowledgeable physicians; 1: burn care; 2: open heart surgery; 3: organ bank; 4: hemodialysis outpatient; 5: hemodialysis inpatient; 6: therapeutic radioisotope; 7: diagnostic radioisotope; 8: EEG. The tie between the consortium (missing the burn care unit) and the joint venture (missing the organ bank) was resolved on the basis of this rating.

some degree compromise its investment in complex medical technology, that is, in patient care. The joint venture, with its interests and resources devoted to medical technology, consequently invests fewer resources in education. According to this interpretation, the consortium comes closest to being the "ideal" system with a relatively high resource commitment to both education and medical technology (patient care), a position built in part upon its greater size. The corporate system is in effect operating on a different plane. Its commitment to education is low, yet its resources are not being applied to sophisticated patient care. Comparisons based on the system goal of research are confounded by the variety of meanings attached to the word.

Structure of Multihospital Systems

In contrast to the difficulties of conceptualizing and measuring the strategy of the multihospital systems, the analysis of interorganizational structure is facilitated by the literature on organizational structure. We initially conceptualized interorganizational structure in terms of centralization, departmentation, standardization, and integration. In inductively applying these concepts to the multihospital context using the data gathered in our interviews, we defined structure as formal linkages among the hospitals comprising a multihospital system and have identified six relevant indicators: (1) degree of centralization of budgetary process; (2) degree of standardization of the management information system; (3) number of decision-making centers; (4) degree of integration of administrative services; (5) degree of integration of medical services; and (6) degree of integration of medical personnel. Only indicators 5 and 6 specifically refer to multihospital systems; the other four would apply to any interorganizational system.

After analyzing organizational documents and reviewing our interview data, we have relied on our judgments—since objective interorganizational data were

Table 13.3 Rank Order of the Multihospital Systems on Structure^a

System	Degree of Centralization of Budgetary Process	Degree of Standardization of Management Information System	Number of Decision-Making Centers	Degree of Integration of Administrative Services	Degree of Integration of Medical Services	Degree of Integration of Medical Personnel
Consortium	1	1	1	1	2	2
Joint venture	2	2	2	2	3	3
Merger	3	3	3	3	4	4
Corporate management system	4	4	4	4	1	1

^a Kendall $W = .47$, significant at .05.

not available—in rank ordering the four multihospital systems on these six indicators (see Table 13.3).

It is noteworthy that the corporate system does not rank highest on two of the variables: the degree of integration of medical services and the degree of integration of medical personnel. The corporate system, because of its protective attitude toward the entrepreneurial prerogatives of physicians, does not structurally integrate its medical services or medical personnel. Medical services might be shared, but in the hospitals we have studied in the corporate system, several of which are physically close to one another, this happens by exception, not as a matter of policy. Similarly, medical personnel might refer patients to more than one of the corporate system's hospitals, but this decision is left to the discretion of the physicians. Instead of using physicians as integrating agents within the hospital system, the corporate management system prefers to rely on the other four structural mechanisms for integrating its hospitals. If any policy exists with respect to medical services and personnel, it is an informal one that the hospitals should compete for physicians and patients.

Otherwise, the rank orderings of the structural indicators are not surprising. The corporate management system and the merger have more centralized, standardized, and integrated structures than the joint venture or the consortium.

Performance of Multihospital Systems

Evaluating the performance or effectiveness of multihospital systems poses a new set of measurement challenges. Ultimately, hospitals treat patients, and the performance of hospitals is thus related to the success with which a hospital can provide health care and cure patients. The difficulties involved in developing such outcome measures (Brook *et al.*, 1976) have recently been observed by

Shortell (1976: 7):

Unlike cost and productivity data, which can usually be obtained from existing data sources, objective measures of quality must usually be collected first-hand by the researcher in each organization. This, of course, raises problems of gaining access to medical records, which contributes to the more general problem of obtaining the participation of hospitals and other health service delivery organizations in the proposed research.

We have chosen to consider so-called structure quality performance measures for several reasons. Despite general claims that multihospital systems have a positive impact on quality of health care, there are presently no empirical studies that either confirm or disconfirm this proposition. Indeed, Stull (1977: 45) has claimed that "multi-unit organizational arrangements [of hospitals] essentially are systems of organization and management." Therefore, to concentrate on outcome performance indicators might not be an appropriate research strategy for analyzing multihospital system performance. Furthermore, if process quality and outcome quality differences did result from the formation of the multihospital systems that we have studied, these results presumably would be manifested after some time lag. Since two of the systems we have analyzed are relatively young, it might be too early for performance differences of these types to become evident. By the same logic, the earliest performance changes that one might predict are the structure quality types. For these reasons, we have selected structure quality performance measures, and the reader is reminded that our performance measures represent the instrumental and administrative functions of the multihospital systems.

Using a systems model, Evan (see Chapter 22) has proposed that organizational effectiveness can be conceptualized with the aid of a series of ratios between inputs, transformations, and outputs, and their changes over time resulting in feedback effects. The model can also be used to compare static and dynamic relationships among inputs, transformations, and outputs. Initially, we attempted to compare the multihospital systems over time, before and after the constituent hospitals entered the hospital systems, using the Evan model of organizational effectiveness. The resulting values and rank orderings of this application of the model are shown in Table 13.4. The values presented in Table 13.4 are the percentage of change in the average annual value of the effectiveness ratio before and after the formation of the various multihospital systems.

As regards the change in the total expenses to admissions indicator ($\Delta O/I$) in each of the hospital systems, total expenses are increasing faster than admissions, although the rates of increase vary widely. Surprisingly, in the corporate management system, with its presumed superior ability to control costs, the rate of increase is the largest. It is conceivable that the higher rate of increase of total expenses to admissions in the corporate management system is a function of its case mix, which yields a higher net revenue per patient than those of the

Table 13.4 Rank Order of Values of Multihospital System Performance, Using the Evan Dynamic Organizational Effectiveness Indicators^a

System	Total Expenses/ Admissions ($\Delta O / I$)		Physicians/ Admissions ($\Delta T / I$)		Nurses/ Payroll ($\Delta T / O$)		Admissions/ Admissions ($\Delta I / I$)		Nurses/ Physicians ($\Delta I / I$)		Payroll/ Total Expenses ($\Delta O / O$)	
	Rank Order	Rank Order	Rank Order	Rank Order	Rank Order	Rank Order	Rank Order	Rank Order	Rank Order	Rank Order	Rank Order	Rank Order
Consortium	59.48	1	52.82	3	74.96	3	3.48	2	113.67	4	5.84	2
Joint venture	309.00	3	80.22	4	-92.61	1	53.84	4	-93.76	1	212.32	4
Merger	158.48	2	42.55	2	-39.12	2	-92.29	1	32.90	2	1.33	1
Corporate management system	327.00	4	-82.65	1	164.27	4	30.34	3	60.30	3	129.48	3

The effectiveness ratios are based on the following time intervals:

System	Before System Formation	After System Formation
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Consortium	1970-1974	1974-1976
Joint venture	1970-1974	1974-1976
Merger	1954-1965	1965-1976
Corporate management system	1966-1969	1969-1977

^a Kendall $W = .21$, not significant at .05 / = inputs; T = transformations; O = outputs.

other systems. A more anticipated finding appears in the change of physicians to admissions indicator ($\Delta T/I$), namely, in the nonprofit systems, the numbers of physicians are increasing faster than admissions. In the corporate management system, however, relatively fewer physicians are admitting more patients, a finding consistent with the structural characteristics of the corporate system as regards its physicians.

Change in numbers of nurses to payroll, the $\Delta T/O$ indicator, points to the fact that in the merger and in the joint venture, payroll is rising faster than the numbers of nurses, a possible consequence of the educational thrust in the merger but of undetermined origin in the joint venture. In the corporate system and in the consortium, there is no apparent reason why the numbers of nurses are rising faster than the payroll increases. Change in admissions over admissions, the $\Delta I/I$ indicator, suggests that admissions are relatively sluggish in the merger, stable in the consortium, and growing fastest in the joint venture. In three of the four systems, the number of nurses is rising faster than the number of physicians ($\Delta T/T$), an indication of a probable increase in the quality of health care, but for reasons not at all clear, this is not true of the joint venture. Finally, the consortium and merger appear most successful in linking the rate of payroll increase to the total expense level ($\Delta O/O$).

As compared with the degree of concordance in the rankings of the measures of strategy (see Table 13.1) and in the measures of structure (see Table 13.3), the relatively low Kendall W coefficient in Table 13.4 is somewhat puzzling. We initially attributed the low degree of concordance in the rankings of the performance measures to the potential unreliability of comparing the static measures of strategy and structure with the dynamic measures of performance. Consequently, we examined the rank order of the four systems using the three Evan static measures of effectiveness (see Table 13.5). While the use of the

Table 13.5 Rank Order of Values of Multihospital System Performance, Using the Evan Static Organizational Effectiveness Indicators^a

System	Nurses/ Payroll (T/O)	Rank Order	Nurses Admissions (T/I)	Rank Order	Expenses/ Admissions (O/I)	Rank Order
Consortium	.000028	1	.032	3	1123.0	4
Joint venture	.000037	2	.027	1	721.0	2
Merger	.000050	3	.041	4	810.0	3
Corporate management system	.000078	4	.031	2	389.0	1

^a Kendall W = .29, not significant at .05; I = inputs; T = transformations; O = outputs.

static performance measures does increase the level of Kendall W somewhat, the degree of concordance in the rankings of the performance measures continues to fall well below those of strategy and structure. It is very likely that the nature of our performance measures accounts not only for the low values of the Kendall W, but also for the fact that they are lower than the Kendall W values we obtained with our measures of strategy and structure.

Interrelationship of Strategy and Structure

On the basis of our model presented in Figure 13.2, we would expect interhospital strategy to determine interhospital structure, as has been shown in a variety of industrial enterprises (Chandler, 1962; Channon, 1973; Rumelt, 1974). Using our official measures of hospital strategy based on a content analysis of systems goals, the Kendall W for the strategy and structure relationship equals .32, a value that is significant at .05. When the operative measures of hospital strategy based on availability of complex medical technology are used, the strategy-structure relationship yields a Kendall W of .46, a value that is also significant at .05. Thus, the strategy-structure link noted in industrial enterprises appears generalizable to multihospital systems. This finding, consistent with our model presented in Figure 13.2, is nevertheless somewhat surprising given the difference in hospital environmental perceptions, characterized at least partially by threats rather than opportunities. Since strategy formation in multihospital systems is a complicated process whereby three interest groups—board members, administrators, and physicians—negotiate from their relative positions of self-interest, whatever decisions emerge “favor . . . short-term planning and parochial gains” (Perrow, 1963: 142). From this perspective, the structure of the joint venture, as we have observed, can scarcely be said to have followed from strategy; as a compromise, it was presumably distasteful to all participants, and evolved from a would-be merger because of a lack of agreement on a set of hospital expansion and cooperation plans. In short, the joint venture we have observed, as a type of interhospital structure, occurred despite strategy, not as a result of it. Presumably, then, the rank order correlation between strategy and structure in all four systems, as measured by the Kendall W coefficient of concordance, would be higher, were it not for the peculiar history of the joint venture.

Interrelationship of Strategy, Structure, and Performance

We had not explicitly hypothesized a relationship among strategy, structure, and performance in the four multihospital systems, and there is no clear indication that such a relationship should be obtained. Chandler (1962) relates performance to strategy and structure only by implication; and Channon (1973) assesses only strategy and structure. Rumelt (1974), while linking performance with strategy

and structure, finds little relationship among the three variables across or within industries. In other words, performance is difficult to relate to strategy and structure between, say, the oil and automobile industries; and within an industry, performance appears more related to market share and other external factors than to strategy and structure, contingency theory notwithstanding.

Exploring the relationship among strategy, structure, and performance in the multihospital systems—using the various combinations of measures—yields mixed results. Strategy, it will be recalled, has been operationalized as official goals (based on a content analysis) and operative goals (based on the extent of availability of complex medical technology); structure was measured with the aid of subjective ratings on six dimensions; and the performance measures are based on Evan's static and dynamic indicators. Using the dynamic indicators of performance with the official measures of strategy, we obtain a negligible Kendall W value of .07 for strategy, structure, and performance; substituting the operative measures of strategy yields a Kendall W value of .13; neither value is statistically significant. However, when the Evan static indicators are used along with the official measures of strategy, the Kendall W for strategy, structure, and performance equals .26, which is significant at .05; when the operative measures of strategy are used, the Kendall W equals .31, which is again significant at .05.

This finding, using the static performance measures, is consistent with the statistically significant relationship we have observed between strategy and structure. Moreover, the partial relationships, that is, the relationships between strategy and performance (Kendall W equals .34 and .33 for official and operative measures of strategy, respectively) and structure and performance (Kendall W equals .29), support our inference that our finding concerning the interrelationship of strategy, structure, and performance is statistically significant. Thus, the multihospital systems under consideration appear to have achieved performance levels that are to some extent consistent with their strategies and structures.

CONCLUSION

The application of Chandler's (1962) concept of strategy to nonprofit interorganizational entities such as multihospital systems is fraught with ambiguity. In our exploratory study, we have had to differentiate official or stated goals from operative goals. Unlike the strategy of growth in industrial organizations, the operative goals of multihospital systems do not lend themselves as readily to measurement. Nevertheless, given our use of interview data supplemented by a secondary analysis of administrative data, we have observed some appreciable differences in the strategies of the four multihospital systems.

The consortium, which was formed with a political strategy in mind—namely, to achieve a balance of power among the member hospitals and

to increase their collective bargaining power vis-à-vis the state hospital cost commission—has, in addition, a high commitment to regional patient care as evidenced by its investment in complex medical technology. Moreover, because the consortium includes a state hospital associated with the new state medical school, it is also conducting research, both clinical and laboratory, and operating an extensive medical education program for medical students, interns, and residents.

In the joint venture, which sought to modernize as well as to regionalize health care, we have observed the highest level of commitment to patient care as indicated by the availability of complex medical technology and by its articulation of stated patient care goals in its articles of incorporation and bylaws.

In the formation of the merger, two strategies appeared to be of uppermost significance to the decision makers: rationalization of hospital costs by eliminating duplication and triplication of services and the creation of a critical mass—as regards the number of hospital beds and level of medical expertise—to warrant and support a state-funded medical school. This dual strategy is reflected in the prominence the merger attaches to education—as evidenced by its high ranking in the content analysis of the articles of incorporation and bylaws—which may be partially at the expense of patient care, since it has a relatively low investment in complex medical technology.

The strategy of the corporate management system revolves principally around maximizing the rate of return to its investors through a carefully planned and monitored budgetary and management information system. Compared with other multihospital systems, it has the lowest level of investment in complex medical technology, is relatively low in education, and conducts no research at all.

Clearly, the strategies of the four hospital systems differ. Their structures, although differing along many dimensions such as degree of centralization, standardization, and functional integration, do not, however, seem to be associated with their different strategies in as unique a manner as in the case of the industrial organizations studied by Chandler (1962), Channon (1973), and Rumelt (1974).

The relationship between strategy and structure in multihospital systems, while statistically significant at the .05 level, does not approach the one-to-one correspondence noted in industrial enterprises. This difference in finding may be a function of the absence of a competitive market structure in which health services are offered to consumers. Operating in a quasiregulated industry, the services of multihospital systems are not put to a test, nor is the goodness of fit between their strategies and structures tested to the same degree that the products, strategies, and structures of industrial organizations are. Under these circumstances, the level of our strategy-structure fit may be understandable.

Our finding that strategy, structure, and performance (using the Evan static indicators) are significantly interrelated indicates that the multihospital systems have to some extent linked performance to strategy and structure. To increase our understanding of the interrelationship of strategy, structure, and performance

and to discover the scope of its generalizability, our finding suggests the need to explore and identify other interorganizational systems in order to ascertain the conditions under which strategy, structure, and performance are consistently and strongly interrelated. Obviously, a sample of multihospital systems rather than our four case studies—or Chandler's case studies for that matter—would permit a proper statistical test of the interrelationship of the three categories of variables.

By systematically exploring the interrelationship of strategy, structure, and performance in a variety of organizational and interorganizational contexts, organizational researchers will very likely increase their understanding of how organizations are interrelated with their environments.

Research and Development Consortia

For several decades, American industry has encountered fierce competition from foreign countries in such industries as steel, automobiles, electronics, and semiconductors. In the interest of promoting the competitiveness of American industry, Congress passed the National Cooperative Research Act (NCRA) in 1984. It legalized the research and development (R&D) consortium, an organization in which competing members of the same industry work together on precompetitive research (Wright, 1986).

These consortia typically involve two or more competing manufacturing companies pooling their resources to create a new legal entity to conduct R&D. They include substantial member-company contributions of capital, technology, and other assets, but not a merging of the members. Their management—like the management of multinational and multidivisional organizations—poses unusually complex problems (Kanter, 1989).

As of 1992, over 200 consortia filed with the Department of Justice in order to limit their antitrust exposure. While many are in the computer and telecommunication industries, consortia have also been formed in the agriculture, automotive, biotechnology, chemicals, glass, petroleum, and plastics industries (Gibson and Smilor, 1992: 255–267).

To explore some of the management innovations introduced by consortia, we present a detailed comparative analysis of four R&D consortia: Center for Advanced Television Studies, Corporation for Open Systems International, Microelectronics and Computer Technology Corporation, and Plastics Recycling Foundation. Interviews with consortia managers identified seven generic problems: recruiting personnel, obtaining resources, recruiting new members, decision making, legal issues, membership turnover, and evaluating and producing outputs.

PRECURSORS

The business consortium harks back to the nineteenth century, when U.S. companies within a given industry (e.g., banking and railroads) joined together to pursue their collective interests, until the Sherman Antitrust Act of 1890 made such collaborations illegal (Boulton, 1961). For that reason, the consortium as a type of business organization has emerged in the United States only since 1984, when the law was revised. These consortia, which are limited to R&D activities, are similar in some ways to arrangements that have existed for many years among U.S. hospitals, educational institutions, and regulated industries. Hospitals, especially those serving the same geographical communities, have developed cooperative arrangements for research, technology sharing, and lobbying (Barrett, 1980; see Chapter 13). Consortia of colleges and universities have varied purposes as well. Some permit students to attend classes at more than one university, others share library books, and still others grant library access to all the schools' students. (Wells, 1967).

Even more closely related to the current phenomenon are the research institutes of the gas and electrical utility industries: the Gas Research Institute and the Electric Power Research Institute (EPRI). These were created in the 1970s to deal with regulatory threats, to develop technological innovations, and to facilitate technology transfer among members of these regulated industries (Lindgren, 1987). EPRI has grown to manage 1,500 research programs and has created seven research centers to test and demonstrate new techniques and equipment (Herbert, 1985).

Another antecedent is the collaborative research centers forged between universities and corporations. These typically involve several companies joining to fund research at one university. Like the utility institutes, they tend to focus on technology development and transfer among the participating organizations (Dimancescu and Botkins, 1986). A noteworthy example is the University City Science Center, established in Philadelphia in 1963. It consists of 28 colleges, universities, and academic health centers that manage R&D projects and create and support science and technology business ventures between companies and nonprofit institutions. One impetus for university-industry cooperative ventures has been the National Science Foundation's Industry/University Cooperative Research Centers program. Since the late 1970s, this program has provided financial and technical assistance for developing university-based research centers (National Science Foundation, 1986). The university oversees faculty and student research, while the industrial participants both contribute money and monitor research. The primary goal is to expand general-knowledge research rather than to develop patentable or commercialized products (Gray *et al.*, 1986).

R&D CONSORTIA

The R&D consortia that are the focus of this chapter have emerged since the early 1980s as an interorganizational alternative to licensing arrangements,

acquisitions, and joint ventures. In some ways, these consortia seem similar to the joint venture, especially when a consortium involves only two member companies. In fact, 40 of the 137 R&D consortia (as of 1989) have only two sponsors. So, in what respects do consortia *differ* from joint ventures? R&D consortia include direct competitors, while most joint ventures do not. An R&D consortium tends to have a less focused goal, because its potential output is uncertain and it is difficult to get members to agree on specific goals. For example, the consortium Center for Advanced Television Studies (CATS) has an open-ended goal: "to promote and sponsor independent domestic research in television science and technology." Also, the equity and other inputs from members of a consortium tend to be appreciably less than those invested by each member of a joint venture. This is not only because a consortium tends to have a large number of members, but also because the total budget of a consortium is usually smaller. An R&D consortium tends to be a more loosely coupled organization than a two-sponsor joint venture.

R&D consortia also should be distinguished from two other organizational forms that are increasingly prominent. The Industry/University Cooperative Research Centers (IUCRCs) described above are a precursor of and have similarities to R&D consortia. An IUCRC, like an R&D consortium, brings together companies to fund a research project. In addition, as in a consortium, company representatives have input into the direction and conduct of the research and evaluate the center's research progress. However, there are substantial differences in operation. First, IUCRCs are typically initiated by the universities, which have substantial input into how the centers operate. By contrast, R&D consortia, even those with strong connections to a university, are initiated by industry representatives, who then seek out a suitable university affiliate. While the research is conducted at the university, the industry members retain control over how the research is conducted. Second, IUCRCs receive initial funding from the federal government. The funds are used to leverage the assistance from industry members until enough members join to make the IUCRC self-sustaining. On the other hand, most R&D consortia do not receive federal funding. Finally, the goal of research conducted by IUCRCs is the development of general knowledge, while R&D consortia focus more on product development and technology feasibility studies (Felker, 1984; Gray *et al.*, 1986).

R&D Limited Partnerships (RDLP) have also become more popular in the last several years. An RDLP is a partnership between a general partner, who oversees the conduct of the research and receives the funding, and limited partners, who invest but have limited liability and no role in the partnership's management. Again, while there may be some overlap with R&D consortia, RDLPs tend to focus more on later stages of innovation and have a shorter time frame—two to three years. In summary, R&D consortia are intended to complement the research of IUCRCs, which conduct primarily basic research, and RDLPs, which undertake mostly commercial research (Felker, 1984; Peters and Fusfeld, 1986).

Legal Aspects

We have observed that a distinguishing factor of R&D consortia is the collaboration of competitors. Until recently, such activity was illegal in the United States. The major barrier delaying the emergence of for-profit consortia was the Sherman Antitrust Act, passed in 1890 to promote competition among companies in the same industry.

Competing countries have not had this legal barrier. Japan and the major Western European countries have separately endorsed collaboration as essential to achieving technological preeminence. Japan's recent success in the semiconductor industry, for example, stems in large measure from a combination of government-backed loans and research subsidies, as well as a pooling of technical and scientific talent to promote efficient R&D. The European Community's liberal exemptions from antitrust regulations similarly encourage R&D consortia, and they have played a critical role in maintaining Europe's competitive position in the computer industry.¹

Rapid changes in the complexity of technology in the 1980s necessitated increased research investment by U.S. companies to remain competitive in the semiconductor and electronics industries. The costs (in some cases over a billion dollars), the risks, and the complexity associated with this type of research made it unlikely that any individual firm could succeed. Following the lead of Japan and Europe, U.S. industry became interested in amending the antitrust laws to permit for-profit R&D consortia. One of the stimuli for this change was the formation of perhaps the earliest U.S. R&D consortium (excepting the gas and electric power research institutes)—the Microelectronics and Computer Technology Corporation (MCC). This consortium of microcomputer and electronic firms recognized the potential legal hazards in pooling their resources for R&D. During its formation and after its establishment, MCC proposed to Congress a change in the antitrust laws. U.S. lawmakers, concerned over the decline in corporate R&D spending and recognizing that U.S. companies were falling behind those in Japan and Europe, unanimously passed the National Cooperative Research Act (NCRA) in 1984. The proponents of this change successfully argued that U.S. firms were reluctant to enter into cooperative research ventures because of the threat of antitrust sanctions. The new law was intended to signal business leaders that cooperative research ventures were not illegal per se (Wright, 1986).

The NCRA encourages cooperative R&D efforts at the precompetitive stage of production by limiting the antitrust exposure of consortia that file with the Department of Justice. Precompetitive research encompasses experimentation and the study of phenomena and observable facts, development or testing of engineering techniques, development of prototypes and models, and collection and exchange of research information. The U.S. government retains

¹ For more information about business groups and consortia in Japan and Western Europe, see Crane (1984); Kuhn (1984); Augustyn (1986); Ouchi (1986); and Gerlach (1987).

the right to adjudicate the legality of R&D consortia. Consortia members can be found guilty of antitrust violations, but by filing they protect themselves from paying treble damages. They can only be held liable for actual costs. Also, they may not have to pay attorneys' fees if they win an antitrust case brought against them by the Department of Justice. In the years since passage of the act, no consortia have been the subject of antitrust lawsuits.

Profile of the 137 Consortia

Numerous consortia, many formed before passage of the NCRA, filed with the Department of Justice soon after the law's enactment.² New consortia file at the rate of about one to two per month. As of August 1989, 137 consortia had registered. While many are in the computer and the telecommunication industries, consortia have also been formed in the agriculture, automotive, biotechnology, chemicals, glass, petroleum and plastics industries. Many consortia members may, however, come from outside the principal industry. For example, the members of the Plastics Recycling Foundation (PRF), which is developing technology to recycle plastic bottles, include plastics manufacturers (e.g., Du Pont and Exxon), plastic package makers (e.g., Coca-Cola and Pepsi-Cola), and plastic package users (e.g., Procter & Gamble and Kraft). While several consortia formally exclude foreign members, at least 20 have foreign members. Conversely, some U.S.-based companies belong to foreign consortia.

The consortia can be divided into two broad types by structure. The first is the freestanding body in which research is conducted in-house. These include MCC and the Corporation for Open Systems International. The second type of consortium serves as an administrative body that coordinates research either at universities or at member-company sites. Examples include CATS, the Semiconductor Research Corporation, and PRF.

The number of members in each consortium ranges from 2 to 92. Forty have only 2 members and more closely reflect the typical two-parent joint venture, but 24 of these are two-party consortia involving BELLCORE, the research consortium for the Regional Bell Companies. These are primarily "one-to-one" research agreements between a researcher at BELLCORE and a researcher at another company. While these are counted as part of the complete group, we do not consider them typical and do not draw on them in generalizing about consortia. The National Center for Manufacturing Sciences has the most members (92). It oversees research projects to develop technologies and systems that will improve manufacturing processes and materials. Ninety consortia have between 3 and 25 members, and 7 have more than 25. The average membership for all consortia is about 13, while the median is 5.

² This section draws on data collected through interviews and Department of Justice filings, and from Ouchi (1986) and Petit (1987).

MANAGING R&D CONSORTIA

The principal reasons for joining a consortium are to achieve economies of scale, to share the risks involved in an innovation, to set a standard for a new technology, to share complementary knowledge, and to help protect “leaky technology” from being appropriated by companies not sharing in the research efforts (Ouchi and Bolton, 1988). Companies view R&D consortium membership as risky because proprietary interests might inadvertently be compromised. There is also uncertainty over whether a company will be as successful as some of its competitors in exploiting the findings of the R&D program. Some potential member companies may believe the returns are not worth the effort. Because of such concerns, the formation of this new type of organization is fraught with difficulties. However, U.S. managers have been willing to cope with these difficulties to overcome a greater problem: the threat of market loss to a foreign competitor with superior technical competence.

Two Distinguishing Characteristics

To operate this new organizational form effectively, managers are working on problems stemming from two characteristics unique to the structure of R&D consortia. The first is that consortia are not completely separate from member organizations. Consortia represent a *supracorporate* challenge, which creates a tension between the goals of the consortium and those of its individual members. The CEO and the lower-level managers of a consortium are faced with multiple and sometimes conflicting demands of member companies, as well as with economic and political issues that transcend the concerns of member companies. Consortium managers must therefore have knowledge of and be sensitive to differing member needs and objectives. In addition, consortium managers have to develop decision-making procedures that permit input by member companies but that still allow the consortium to arrive at a consensus quickly. Managers of member organization have to cope with sharing resources with competitors as well as with sharing control of a consortium. At the same time, these managers are concerned with the divulging of proprietary information and with the appearance of collusion. Another function of multiple sponsorships is the great effort by consortium management to justify the inputs from member organizations and to disseminate consortium outputs. Consortium managers rely on member companies for important resources—money, personnel, and technology. But to maintain member interest, these managers strongly emphasize the outputs of the consortium—reports, product innovations, patents, and demonstrations.

The second distinguishing characteristic—related to having multiple members—is that, once formed, a consortium will usually experience membership changes. Unlike most conventional joint ventures, in which two parties control the venture and the loss of a member means the venture’s dissolu-

tion, most consortia continue to operate after losing members. To compensate for these losses, consortia have to recruit new members. Managers of potential members must continually evaluate the option of joining an established consortium, and managers of existing members, the option of leaving.

As these two characteristics suggest, the creation and maintenance of consortia represent unusual problems for managers and for companies.

Four Consortia

To explore some of the management innovations introduced by consortium managers, we will draw upon interviews with managers from four consortia. We chose these four consortia because we believe they represent some of the differences in structural arrangements, in membership sizes, and in focal industries of R&D consortia, and because each consortium had been operating for several years, during which it developed responses to managerial problems.

The first is the Center for Advanced Television Studies. It officially began in 1983, when several broadcast, television equipment, and cable coding companies organized to develop new television technology and to increase the amount of domestic research being done. CATS's 12 members do not expect to be involved in the development of products, but they do want to be knowledgeable about new technologies that might affect their industry. Consequently, CATS oversees research conducted at a university center by a professor and his students.

The second is the Corporation for Open Systems International (COS). It began in 1985, when a computer trade association addressed the problem of incompatible computer systems. COS's goal is to accelerate "the introduction of interoperable multivendor products and services" that will permit computers to communicate directly with each other. Most of the research is conducted in-house, and COS, which has approximately 60 members, has developed a number of products for testing and certifying that a piece of equipment has met its requirements.

The third is Microelectronics and Computer Technology Corporation, which began operations in 1983 with the purpose of conducting in-house, long-term R&D in microelectronics and computer technology. It initially had four research programs: advanced computer architecture (artificial intelligence and computer design), CAD/CAM, software and chip packaging. A fifth program, on superconductivity, began in 1987. MCC currently has 19 members.

The fourth consortium is the Plastics Recycling Foundation, started in 1985. This is another example of a trade association stimulating the creation of a consortium; its primary objective is to cope with the growing problem of solid waste management. This consortium seeks to head off regulations on the use of plastics in products such as soft drink bottles and Styrofoam cups by developing and promoting recycling technology. Toward this end, it has built a pilot plant to demonstrate the technology. PRF has 41 members and, like CATS, oversees university research programs.

Seven Generic Problems

We now turn to a discussion of the organizational policies of these four consortia as they relate to seven generic problems, identified by the managers, that stem from the two unique characteristics of this organizational form. The seven managerial problems are recruiting personnel, obtaining resources, recruiting new members, decision making, legal issues, membership turnover, and evaluating and producing outputs. Because of the novelty of consortia, managers have had little experience or guidance in addressing these problems. Therefore, in some instances their responses are quite varied. We will primarily present common responses, but we note innovative responses where they exist. Table 14.1 details how each consortium deals with each problem.

Recruiting Personnel. Obviously, research consortia need especially qualified personnel. Employees are recruited from two general sources, member companies and outside sources.

There are several advantages and disadvantages to recruiting from consortium members. For a member company, sending employees to help conduct the research is the most effective way to transfer knowledge back to the member company (Hippel, 1988). For example, MCC encourages the transfer of information by using "liaisons"—resident staff members from shareholder companies who are responsible for keeping their companies informed of the consortium's progress. In addition, these employees help to represent their company's interests in the consortium. Using employees from member organizations also helps a consortium establish a staff quickly. On the other hand, the expense of loaning or donating an employee may be prohibitive for some companies, and the employees offered may not have the cutting-edge knowledge and skills necessary for the position. MCC believes it is essential for the consortium to have discretion over who is deemed acceptable. The recruitment problem is important principally to consortia that conduct in-house research. Those that contract out the research to universities, like CATS and PRF, use primarily faculty and students.

All of the consortia, however, encourage or require some level of involvement by sponsor employees. MCC consistently permits researchers from member companies to visit, for any length of time, to facilitate technology transfer. COS and PRF both use member employees to staff technical subcommittees that oversee various consortium projects. While not full-time employees of the consortium, they play a role in its operations. COS receives a commitment of up to, and sometimes more than, 20 percent of top-level executives' time in overseeing projects. In general, these consortia realize the importance of member employee involvement, not only as a source of employees but also as an effective vehicle for technology and information transfer. These "boundary spanners" are important in maintaining a strong relationship between a consortium and its member companies. This is especially true when the member employee is a high-ranking manager.

Table 14.1 Management Innovation in Selected R&D Consortia

Generic Problem	Center for Advanced Television Studies (CATS)	Corporation for Open Systems International (COS)	Microelectronics & Computer Technology Corporation (MCC)	Plastics Recycling Foundation (PRF)
Recruiting personnel	University-affiliated researchers	Almost all from outside Member employee involvement	From member organizations and outside Liaison personnel Visiting researchers	University-affiliated researchers
Obtaining resources	Annual fee Board representation Accepts in-kind contributions	Varying levels of membership Member employee commitment Equipment	Initiation fee Funding for specific projects	Varying levels of membership Accepts member technology
Recruiting new members	Trade shows Brochures U.S. firms only	Trade shows Speaking engagements Advertisements U.S. and foreign firms	Marketing department for recruitment U.S. firms only	Recruitment talks U.S. firms, but will accept foreign firms
Decision making	Board representation Rotating chair	Board representation Technical committees chaired by executive members	Board and technical committee representation for consortium Board and technical committee representation for projects	Board representation biased toward directorate members Technical committee representation
Legal issues	Outside counsel at meetings	In-house counsel at meetings	In-house counsel Active in passage of the NCRA	Outside counsel at meetings
Reason for membership turnover	Too expensive Disagreement over consortium focus	Change in strategic focus of member Acquisition of member	Change in strategic focus of member Acquisition of member	Change in strategic focus of member
Evaluating and producing outputs	Technical reports Display of research projects	Several products Technical reports Testing of equipment COS seal	Licensable technology Technical reports Training programs Researcher transfer	Model factory Product presentation Technical reports

Obtaining Resources. Consortia also receive money and technical know-how from member companies. All four consortia attempt to justify the importance of these inputs from the members. They have adapted to members' differing financial resources and degrees of interest in the consortium. All four permit either varying levels of membership, targeting of involvement to select

projects, or in-kind contributions. These alternatives are a response to member apprehensions about overcontributing. Part of this fear may arise because of the risky nature of the project and the scarcity of company resources, but it is also a fear of contributing information that would be beneficial to a competitor.

The consortia we studied tended to have an initiation fee as well as an annual contribution. While some have one price for membership, others permit companies to join at a reduced level, depending on their interest in the consortium or their ability to pay. For example, PRF has three levels of annual membership: directorate (\$50,000), associate (\$25,000), and supporting (\$5,000). In all four consortia, those who contribute more tend to have more input into decisions.

MCC requires an additional funding criterion beyond the initial equity. Shareholders are required to become members of at least one of the research projects. The funding for a project comes primarily through billing costs and expenses to the members of the project. Thus, not all MCC shareholders contribute equally to each project. An advantage of this policy, beyond supplying added capital, is that it permits members with slightly different research interests to focus their involvement in particular projects.

Member companies may also contribute technical knowledge by contributing researchers, machinery, and, occasionally, new technological processes. For example, Owens-Illinois contributed the basic recycling technology to PRF. The company had developed the technology but did not have enough resources to market it. Some consortia accept in-kind contributions of equipment or administrative services, although this is less common. In lieu of paying a \$100,000 per year fee, the Public Broadcasting Service contributes administrative services to CATS.

Recruiting New Members. Recruitment of new members is necessary to replace members who have left or to help a consortium grow. Recruitment tends to take place through trade journals and trade associations. Consortium managers tended to feel, at the time of our interviews, that most industry members were aware of the consortium because of its promotional activities, which included trade publication announcements, mailings to potential participants, and industry talks. These managers believe that future recruitment will depend not on informing companies about what the consortium does, but rather on convincing companies of the advantages of membership and on expanding the scope of research to appeal to a broader audience. One area of future recruitment for many consortia is foreign companies. Some consortia actively seek foreign members, while others prohibit their involvement. COS has foreign members, while CATS and MCC, which were formed to help maintain U.S. competitiveness, do not permit it. PRF permits foreign members, but does not have any, because recycling is primarily a domestic issue. The consortia we studied are well known in their focal industries. If they fail to attract new members, those with limitations on membership (e.g., no foreign members) may have to consider relaxing or eliminating the restriction. However, attracting sufficient members, including those key to an industry, has not been a problem thus far.

Decision Making. Because of the large number of companies belonging to a consortium, developing a consensus may be difficult. As a result, each consortium has developed its own decision-making process. While each has a board of directors with a voice in setting overall policies and direction, the composition and power of the boards vary. For example, on CATS's board, which makes all major decisions, each member has a vote, and the chair is rotated among the members. Board representation for PRF depends upon membership level. Each directorate-level member is a board member, while associate members choose one representative for every three members, and supporting members collectively have one vote. The MCC board has one vote per consortium member. Since all members are represented and the board approves the budget for all projects, some companies influence projects they do not support.

In addition to the board, most consortia use committees made up of member representatives to oversee technical direction. For example, while COS permits each member one vote on the board to set the overall agenda, the technical committees oversee implementation of the decisions. Some consortia also develop ad hoc committees to oversee additional administrative duties.

Taken together, these decision-making processes suggest that currently there is no agreed-upon way to make decisions. What is common is that decision-making processes elicit inputs from all members but tend to favor those who have a direct interest in the decision or a greater investment in the consortium.

Legal Issues. The potential for antitrust violations and the need for regulatory approval for innovative products has made top consortium managers cognizant of the legal issues involved. We found their concern to be greater than that of managers of international joint ventures and of other organizations. Inasmuch as the NCRA does not completely exempt them from antitrust regulation, R&D consortia must continually examine their activities to ensure compliance with the law. Each consortium either has an in-house counsel or has contracted with a law firm to monitor its activities. These lawyers attend board meetings and may terminate discussions that, in their judgment, might inadvertently lead to trade secrets being revealed.

Another legal consideration is attaining approval from regulatory agencies. Because many of the consortia are working on new technologies for which there are usually no precedents, managers must allow time for regulatory agencies to review and approve the technology. For example, one of CATS's projects is research on a high-definition television (HDTV) system, which requires a different transmission frequency bandwidth than conventional television. This technology is subject to the Federal Communications Commission's deliberations about which frequencies are acceptable for HDTV transmission.

Membership Turnover. When a company leaves, a consortium loses resources. While each of the four consortia studied has increased overall membership since inception (increases range from 25 percent to 96 percent), each has had some members depart. The percentage of all the companies that have

ever been members and have left ranges from 6 percent to 24 percent. The reasons cited for terminating membership can be separated into two types: disagreement over consortium operations and unrelated external factors. The first type includes dissatisfaction with the productivity or direction of the consortium, and the high price of membership. External factors cited for leaving are a change of corporate strategy, which made membership no longer reasonable or attractive, and the acquisition of a member company by a firm that did not want to continue membership.

As this list suggests, the reasons for membership turnover are diverse. The potential for turnover, however, has motivated managers to improve relations with member companies. In the future, when a company leaves a consortium, it will be important for the consortium managers to determine whether the loss is due to poor consortium management or to unrelated external factors.

Evaluating and Producing Outputs. Consortium managers emphasized that disseminating outputs to members is critical to maintaining good relations because, as the turnover percentages imply, individual member companies may fear that they are not getting a fair return on their investment. Evidence of progress reduces members' concerns. For example, after PRF presented some initial findings at an early meeting, the members' attitude toward belonging to the consortium improved. Some outputs may generate a *perception* that by belonging a company is staying on the technological cutting edge, or that by sponsoring research it is helping the U.S. economy or encouraging new researchers to enter the field; in fact, though, assessing this output is difficult. Consequently, consortium managers use a number of mechanisms to show research results and to maintain member interest. These include making presentations; distributing newsletters, videotapes, and meeting minutes; and offering tutorials to member organizations' researchers.

Tangible products represent another output important to members. COS is selling several conformance test products, and the profits are being channeled back into the consortium's development. COS also offers the COS Mark program, a mark-of-approval sticker—like the Underwriters Laboratory safety sticker—that appears on computer and communication products. Manufacturers will be able to use this mark to show that their products have met COS requirements. MCC also plans to license its technology for use by nonmembers.

CONCLUSION

Research and development consortia are a relatively new organizational form, so it may be premature to predict whether they will continue to prosper or are a temporary phenomenon. While we believe they are necessary for maintaining U.S. competitiveness, their success will depend upon managers' ability to

develop responses to the challenges of consortium management. That some consortia have existed for more than eight years suggests that managers are achieving some level of success. Nevertheless, we believe it is too early to evaluate the effectiveness of differing approaches. The consortia we have studied are just beginning to license products and apply for patents.

From our initial observations, we can, however, draw a number of conclusions. First, consortium managers have found it important to maintain active involvement by members not only to justify their inputs and to disseminate the outputs, but also to ensure the transfer of technology. Consortium managers believe that the more member companies participate, the more both they and the consortium itself benefit. Second, boundary spanners between member companies and a consortium are important for transferring technology and for relaying information about the interests of members and the progress of the consortium. Third, consortium managers are realizing the importance of keeping current members and of soliciting new members to facilitate future growth.

We predict that each R&D consortium will experience a range of intraconsortium conflicts because of equity problems. Whether all of these problems are handled to the satisfaction of the member organizations is an open question. Consortia must develop mechanisms for handling conflict effectively. This may involve drafting a contract requiring a distribution of benefits to each member in proportion to the amount of its investment or establishing an ombudsman with the authority to investigate member grievances and present recommendations to the consortium board of directors.

Some consortia will probably fail to improve the global competitive position of their industry and therefore die without achieving their avowed objective. That some will not succeed does not mean that this organizational form is destined for failure. Rather, it poses a challenge to the managers of this new type of organization. We have highlighted some of the demands, but more will occur as consortia develop. To handle these demands effectively, companies will need experienced and capable managers, especially if antitrust laws are further relaxed to permit consortia to go beyond R&D and begin commercializing their findings.

In short, if the R&D consortium as an organizational form survives into the next century, as we anticipate that it will, a new generation of managers will have to be trained to cope with problems specific to this new form. This is a challenge not only to U.S. management but also to business schools. It may not be long before business schools offer special programs to increase the sophistication and managerial know-how of R&D consortium managers.

PART V

TRANSORGANIZATIONAL ENVIRONMENTS

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Culture and Organizational Systems

As we have seen in Chapters 9–14, crossing the boundary of a focal organization to ascertain the effects of environing organizations on its internal structures and processes, and, in turn, the influences of a focal organization on its organizational environment, is an immensely complex undertaking. Under the circumstances, if one ventures beyond interorganizational interactions—a realm I designate as “transorganizational environments” in Part V—the complexities appear to increase by an order of magnitude. And yet, it is my prediction that organization theory will move in this direction in the future for at least two reasons: a substantial amount of variation in organizational structures and processes will probably be explained by introducing macro-societal variables; and it is important for organizational research to forge a link between organization theory and macro-societal theory, especially since the structures of modern societies are becoming increasingly populated by organizations and organizational networks (Boulding, 1953; Presthus, 1962).

In Chapter 15, the first “transorganizational environment” analyzed is “culture,” by which is meant the norms and values that tend to influence the behavior of the members of a society. A general argument is made for including cultural variables in cross-national studies of organizations. After singling out the normative dimension of culture as being most relevant for organizational research, the Kluckhohn-Strodtbeck (1961) theory of value orientations is presented. The heuristic value of this schema is illustrated by formulating a set of hypotheses relating dimensions of value orientations to such organizational system variables as recruitment, socialization, communication, and organizational output.

Are organizations “culture-free” or “culture-bound”? In recent years, organizational researchers have been increasingly looking for the answer (Lammers and Hickson, 1979b), which has profound implications for the behavior of management practitioners, especially of multinational firms (Joynt and Warner, 1985).

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Since World War II, two independent developments have occurred that, if they interact in the future, may greatly facilitate the growth of cross-cultural research on organizations (Evan, 1975a). I refer to the internationalization of the firm, on the one hand, and to the internationalization of the social sciences, on the other (Evan, 1975b; see also Chapter 18). With the rapid growth in the number, size, and scope of operations of multinational corporations (MNCs), social scientists in theoretical as well as applied disciplines have turned their attention to this phenomenon. Although the spate of publications on MNCs is still largely conjectural in nature, some exploratory as well as systematic studies have been initiated. It is not unreasonable to view the field of comparative management as a response to the emergence of the modern MNC. For example, the pioneering studies of *Management in the Industrial World* by Harbison and Myers (1959) and *Managerial Thinking* by Haire, Ghiselli, and Porter (1966) may be read against the background of the marked expansion of MNCs in the postwar period.

The parallel trend of the internationalization of the social sciences, particularly sociology, political science, and psychology, has its roots in the mandate of UNESCO. To promote educational and scientific cooperation among members of the United Nations in the late 1940s and early 1950s, UNESCO was instrumental in establishing international professional associations in the various social sciences (see Chapter 18). Organizations such as the International Sociological Association and the International Political Science Association interrelate the constituent national professional associations, convene world congresses, stimulate formal and informal communication among social scientists, and encourage cross-cultural comparative research. Publications reflecting this development, to name but a few, are Buchanan and Cantril's *How Nations See Each Other* (1953), Merritt and Rokkan's *Comparing Nations* (1966), and Marsh's *Comparative Sociology* (1967).

In light of these two trends, the efforts among organizational researchers to clarify the relationship between culture and organizational systems has theoretical as well as practical import. Theoretically, it would help explain some of the variation observed or observable in the functioning of organizational systems in different societies; and the accompanying research process would in itself contribute to the internationalization of the social sciences. Practically, such

research can be both illuminating and helpful to MNCs that are often handicapped by their failure to grasp the intangible and subtle aspects of the diverse cultural environments in which they operate.

Thus far, the field of organization theory has failed to come to grips with the cultural component of the environments in which organizations are embedded. This is not at all surprising, because there are formidable conceptual and methodological obstacles to overcome. The fact that MNCs operate in a multitude of cultural and societal settings not only poses a challenge to executives but also provides an opportunity for organizational researchers to use this world-wide organizational phenomenon as a vehicle for research.

The purpose of this chapter is threefold: (1) to outline an organizationally relevant model of culture; (2) to appraise some research in light of the model; and (3) to consider a paradigm for future research.

TOWARD AN ORGANIZATIONALLY RELEVANT MODEL OF CULTURE

The concept of culture, notwithstanding its ambiguity, is used by laymen and social scientists alike in their efforts to explain behavior. That such explanations are often based on impressions and stereotypes does not deter the layman any more than it does the social scientist from using the concept. Two examples will illustrate the point.

An American executive, interviewed in the Harbison and Myers (1959: 388) study in an unnamed foreign country, says:

Somehow or other, we just can't get the local people here to assume any responsibility. They won't make decisions unless you tell them what decisions to make. They hate to take the rap if anything goes wrong. They always want to be in a position to put the blame on someone else if the going gets tough. I think there is some cultural trait in these people which makes them shun responsibility. We will always need Americans here in the key jobs because these local people just don't have what it takes to be a good manager.

In Crozier's (1970) study of two French organizations, he states that Frenchmen have a fear of dependence and avoid face-to-face relationships:

Face-to-face dependence relationships are hard to bear in the French cultural setting, because Frenchmen have a very absolute conception of authority. While they cannot bear omnipotent authority, they feel that it is indispensable if any kind of cooperative activity is to succeed.

Such examples by laymen as well as social scientists can be multiplied. Compounding the confusion is the state of the art in the conceptualization of culture.

Definitions of Culture

Anthropologists have theoretical jurisdiction, so to speak, over the concept of culture. Beginning with Tyler's (1871) enumerative definition, in the intervening years anthropologists have developed innumerable definitions. In their monograph *Culture: A Critical Review of Concepts and Definitions*, Kroeber and Kluckhohn (1952) cite no less than 164 definitions of culture, classified in such categories as descriptive, historical, normative, psychological, structural, and genetic. A small sample of the types of definitions they offer follows :

Benedict: . . . that complex whole which includes all the habits acquired by man as a member of society.

Boas: Culture embraces all the manifestations of social habits in a community, the reactions of the individual as affected by the habits of the group in which he lives, and the products of human activities as determined by these habits.

Malinowski: It [culture] obviously is the integral whole consisting of implements and consumers' goods, of constitutional charters for the various social groupings, of human ideas and crafts, beliefs and customs.

Kroeber: . . . the mass of learned and transmitted motor reactions, habits, techniques, ideas, and values—and the behavior they induce—is what constitutes *culture*.

Sapir: . . . culture . . . is . . . the socially inherited assemblage of practices and beliefs that determines the texture of our lives.

Mead: Culture means the whole complex of traditional behavior which has been developed by the human race and is successively learned by each generation.

Parsons: Culture . . . consists in those patterns relative to behavior and the products of human action which may be inherited, that is, passed on from generation to generation independently of the biological genes.

Kluckhohn and Kelly: By culture we mean all those historically created designs for living, explicit and implicit, rational, irrational, and nonrational, which exist at any given time as potential guides for the behavior of men.

Morris: A culture is a scheme for living by which a number of interacting persons favor certain motivations more than others and favor certain ways rather than others for satisfying these motivations. The word to be underlined is "favor." For preference is an essential of living things . . . To live at all is to act preferentially—to prefer some goals rather than others and some ways of reaching preferred goals rather than other ways. A culture is such a pattern of preferences held by a group of persons and transmitted in time. (Kroeber and Kluckhohn, 1952: 42–56)

In an effort to reduce the buzzing confusion and bring about a truce between warring anthropologists and sociologists, Kroeber and Parsons (1958) set forth a distinction between the concept of culture and the concept of social system:

We suggest that it is useful to define the concept culture for most usages more narrowly than has been generally the case in the American anthropological tradition, restructuring its reference to transmitted and created content and patterns of values, ideas and other symbolic meaningful systems as factors in the shaping of human behavior and in the artifacts produced through behavior. On the other hand, we suggest that the term *society*—or more generally, *social system*—be used to designate the specifically relational system of interaction among individuals and collectivities.

Is it any wonder that Ajiferuke and Boddewyn (1970), in a review of 22 studies of comparative management invoking culture as an explanation, found that only two authors ventured a definition of this much abused concept?

The Normative Dimension

In the interest of facilitating research on the relationship between culture and organizational systems, I shall select what Kroeber and Kluckhohn (1952) refer to as the “normative” dimension of culture, namely, that which deals with values and norms—conceptions of what is desirable and prescriptions or proscriptions of conduct—that guide or affect behavior. This dimension of culture has been the focus of research attention by several social scientists in recent years, especially Osgood (1964, 1971), Triandis (1972), and Geertz (1964). According to Triandis (1972: 4), “subjective culture” is “a cultural group’s characteristic way of perceiving the man-made part of his environment. The perception of rules and the group’s norms, roles, and values are aspects of subjective culture.” For Geertz (1964: 62),

cultural patterns—religious, philosophical, aesthetic, scientific, ideological—are “programs”; they provide a template or blueprint for the organization of social and psychological processes, much as genetic systems provide such a template for the organization of organic processes.

A related perspective on culture is the theory of variation in value orientations by Kluckhohn and Strodtbeck (1961:), a rather abstract but empirically suggestive framework of ideas:

Value orientations are complex but definitely patterned (rank ordered) principles, resulting from the transactional interplay of three analytically distinguishable elements of the evaluative process—the cognitive, the affective, and the directive elements—which give order and direction to the ever-flowing stream of human acts and thoughts as these relate to the solution of “common human” problems.

Embedded in this definition is a set of assumptions comprising a theory of culture. First, there is a limited number of “common human” problems, five of which have tentatively been singled out by Kluckhohn and Strodtbeck (1961: 11) as follows:

1. What is the character of innate human nature (human nature orientation)?
2. What is the relation of man to nature (and super-nature) (man-nature orientation)?
3. What is the temporal focus of human life (time orientation)?
4. What is the modality of human activity (activity orientation)?
5. What is the modality of man’s relationship to other men (relational orientation)?

Second, there is a limited range of variation to the solutions of common human problems. Third, the variation in value orientations in any society results in the co-occurrence of *dominant* and *variant* value orientations. The authors’ fivefold classification of value orientations—associated with the five common human problems—and the range of variation postulated for each—is presented in Table 15.1.

It is noteworthy that Parsons and Shils (1951: 59), in their analysis of “cultural systems” as a component of their general theory of action, accord special significance to value orientations, which they conceive as “*strategically* the most important parts of culture for the organization of systems of action (Parsons and Shils 1951: 59).”

To test the differences and similarities in the rank orderings of value orientations in five cultures, Kluckhohn and Strodtbeck (1961) constructed a research instrument that consisted of delineating types of life problems and then posing

Table 15.1 *The Five Value Orientations and the Range of Variations Postulated for Each*

Orientation	Postulated Range of Variations					
	Evil		Neutral	Mixture of Good and Evil	Good	
	Mutable	Immutable	Mutable	Immutable	Mutable	Immutable
Human Nature						
Man-nature	Subjugation to nature		Harmony with nature		Mastery over nature	
Time	Past		Present		Future	
Activity	Being		Being in becoming		Doing	
Relational	Lineality		Collaterality		Individualism	

Source: Kluckhohn and Strodtbeck (1961: 12)

alternatives that are indicators of their theoretically formulated classes of value orientations. Unlike most of the contributions to the literature on values, the Kluckhohn-Strodtbeck study is one of the few important theories and research studies that may be of help in advancing our understanding of the relationship between culture and organizational systems. In defining value orientations as “principles” guiding human conduct, they direct our attention to a much-needed research perspective on the relation between culture and organizational phenomena.

From the vantage point of organizational systems, culture is but one of three classes of environmental factors that generate positive and negative inputs to the focal organization, increasing or diminishing uncertainties concerning the mobilization of various resources (see Chapters 9 and 10). The other two environmental components—which I shall mention only in passing in this context—are social-structural and interorganizational in nature. To be sure, these three elements of an organization’s environment are only analytically distinguishable.

Culture, in its normative dimension, comprises the “hidden” or “silent,” if not “turbulent,” component of any organizational environment. It is the most encompassing of the three components in that it influences the role definitions of all members of a society. The social-structural component consists of the status-sets of organizational members in their capacities as role occupants outside the boundaries of the focal organization, that is, in the various institutional spheres of society. The status-set profiles of all organizational members are of crucial import for their role performance within the focal organization. This is especially true of what Parsons (1960: 59–60) calls “institutional” personnel, who are concerned with overall policy making, with the legitimation of the organization, and with the mobilization of resources; and of “managerial” personnel, who mediate between the demands of the “technical” and “institutional” personnel.

The interorganizational component of the organization’s environment is the most proximate and most directly affects not only which inputs are obtained but also how the outputs are channeled to various “markets” (see Chapters 9 and 10). From a micro-economics-of-the firm perspective, the degree of competitiveness in the interorganizational environment and the adaptational strategies that are developed to cope with market uncertainties—for example, price collusion, vertical integration of production, interlocking directorates, merges, and the like—will determine the organizational systems’ effectiveness.

How the three environmental components are interrelated is an intricate theoretical and empirical problem that may be depicted in a concentric circle diagram shown in Figure 15.1. The innermost circle represents an organizational system, the design of which may vary along many dimensions, especially as regards types and degrees of hierarchical differentiation of its role structure. Surrounding this system is an interorganizational system that consists of a complex of organizations with which the focal organization has sustained relation. Impinging on the interorganizational system as well as on the organizational system is the culture of the society as a whole. The outermost circle, the social

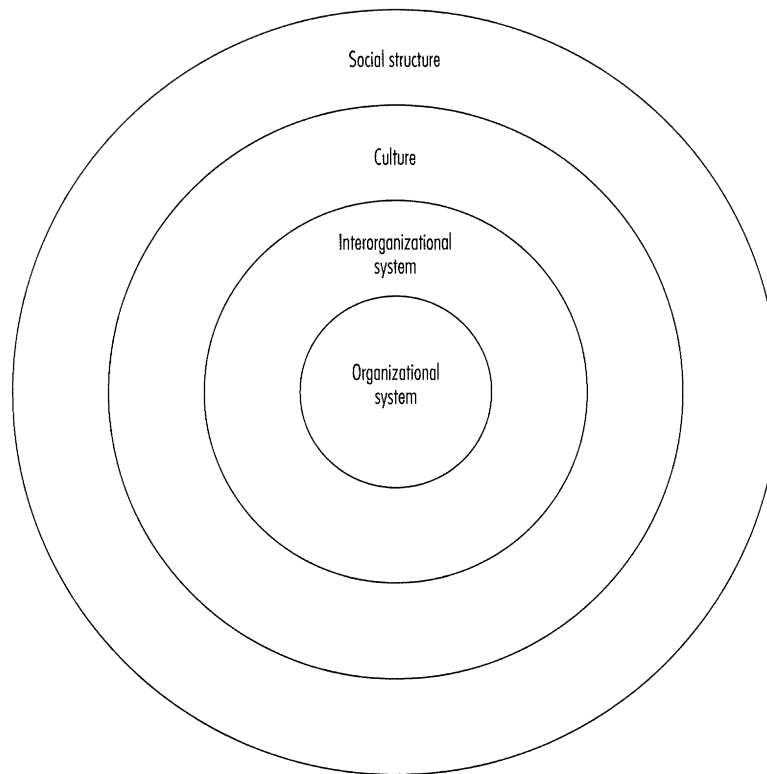


Figure 15.1 Impact of social structure, culture, and interorganizational system on an organizational system.

structure of the society, in turn affects the culture, the interorganizational system as well as the organizational system.

Culture, Organizational Processes, and Organizational System Outputs

How can the “cultural circle” be conceptually linked to the organizational system so that the relationship between value orientations and organizational behavior can be investigated? Although the organizational system can be partially broken down into individual behavior, for the purposes of this discussion, I shall consider only the aggregate level at which organizational processes and organizational system outputs are crucial. From a process standpoint, there are at least three generic and recurrent activities in all organizations: recruitment of personnel, socialization of personnel, and communication among members in connection with role performance. As regards organizational system outputs, let us assume one or more measures of effectiveness in terms of one or more input-output (O/I) ratios. Now, can we with the aid of Kluckhohn and Strodtbeck’s (1961) (K-S) theory—or some other value theories, such as

Parsons' (1951) pattern variables and Hall's (1966) proxemics theory—predict organizational process-behavior profiles and O/I levels of organizational system outputs? My guess is that it is possible. For instance, in terms of the K-S theory, a rank ordering of three of their value orientations—time, relational, and man-nature—might lead to the following hypotheses. A value-orientation profile of:

Future (fu) preferred over Present (pr) preferred over Past (pa)
Individualism (i) preferred over Collaterality (c) preferred over Lineality (l), and
Mastery-over-nature (M) preferred over Harmony-with-nature (H) preferred over Subjugation-to-nature (S).

would be conducive to an organizational recruitment policy based on universalistic rather than particularistic criteria, a formal rather than an informal socialization process, a high frequency of multidirectional instead of unidirectional communication, and finally, high levels of organizational systems outputs. A more detailed formulation of the hypotheses is presented in Table 15.2.

The details of these particular hypotheses are not as important as the concern with explicitly testing for the empirical relationship between dimensions of value orientations, on the one hand, and dimensions of organizational system behavior, on the other. An independent measure of each class of variables avoids the tendency toward tautological explanations: inferring cultural effects from

Table 15.2 *Some Hypotheses on the Relationship Between Value Orientations and Organizational System Processes and Outputs*

Value Orientations ^a	Organizational Processes			Organizational Outputs
	Recruitment	Socialization	Communication	Output/Input Ratios (Economic and Noneconomic)
1. Time				
<i>Fu > Pr > Pa</i>	Universalistic	Formal	Multidirectional	High
vs.				
<i>Pa > Pr > Fu</i>	Particularistic	Informal	Unidirectional	Low
2. Relational				
<i>I > C > L</i>	Universalistic	Formal	Multidirectional	High
vs.				
<i>L > C > I</i>	Particularistic	Informal	Unidirectional	Low
3. Man-nature				
<i>M > H > S</i>	Universalistic	Formal	Multidirectional	High
vs.				
<i>S > H > M</i>	Particularistic	Informal	Unidirectional	Low

^aSee the Kluckhohn-Strodtbeck (1961) notation, which uses abbreviations for the types of value orientations (shown in Table 15.1) and the "greater than" symbol to denote "preferred over."

some observed behavior and inferring behavioral effects from some observed cultural attribute. In addition, a test of hypotheses such as these would ideally be undertaken in two contexts: (1) with a representative sample of members of one or more organizations (preferably a sample of organizations) whose rank orderings would be elicited on the K-S value orientation schedule; and (2) with a representative sample of the members of the society as a whole in which the focal organization(s) is(are) located. If a comparison of the organizational with the societal samples were to establish that subjects that are matched on such variables as occupation, education, and age are similar in their value rank orderings, then this would point to the impact of dominant values of the societal culture on the organizational members. However, if the samples differed, it would suggest that the value orientations of the organizational members are reflecting variant values and that there is evidence of what might be called an "organizational subculture."

Problems of Measuring Culture

In view of the multidimensional definitions of culture, it is not surprising that relatively few efforts have been made to measure any of its dimensions. Then, too, anthropologists, the principal custodians of this concept, rely almost exclusively on nonparticipant observation and intensive interviewing of informants, and thus have not felt a need for research instruments such as those that psychologists, sociologists, and other social scientists are accustomed to using. Consequently, there are few research instruments that purport to measure the normative aspects of culture and that can be adapted to cross-cultural research on organizational systems.

A major obstacle to the design of such instruments is to reduce culture-bound assumptions to a minimum—if eliminating such assumptions is impossible. The principle of "functional equivalence" in measuring instruments, developed by Przeworski and Teune (1970: 113–131) in the course of a four-nation study of values in community leadership, will probably prove useful for future designers and redesigners of research instruments measuring cultural variables. According to this principle, it is neither necessary nor advisable to use identical sets of questions in diverse cultural settings if they do not have identical meanings. One can use different items in different cultures provided one has evidence that different indicators refer to functionally equivalent concepts such as norms and values. For example, if one is interested in measuring how people evaluate time in the course of a day's activities, one obviously need not ask whether respondents own watches, look at clocks, or ask others for the time during the day. Functionally equivalent indicators might be questions pertaining to checking a sundial, looking at the position of the sun in the sky, and having feelings about lateness in performing a work role or in meeting people.

One of the more promising research instruments for studying the normative aspects of culture is the K-S value orientation schedule designed for a study of five cultures in the Southwestern United States (Navajo, Zuni, Mormon,

Texan, and Spanish-American). This schedule is incomplete in that one of the five theoretically postulated value orientations, human nature, was never operationalized. Although the value-orientation schedule already has been adapted for use in Japan, further cross-cultural applications will probably have to consider the problem of "functional equivalence" (Caudill and Scarr, 1962). For example, the item in the schedule pertaining to well arrangements is not likely to be perceived as a salient life problem in some urban industrial cultural settings (Kluckhohn and Strodtbeck, 1961: 80–81).

Another promising type of instrument is the semantic differential. Selecting concepts as stimuli for analyzing respondents' values may prove more reliable and valid than constructing direct questions or hypothetical situations. The choice of concepts and bipolar scales would require extensive cross-cultural pretesting. The evaluative factor in the semantic differential provides a measure of the ranking of values, as some studies by Osgood (1964), Triandis (1972), and others suggest. Whether it can be used to elicit the rank orderings of value orientations based on the K-S theory is worth exploration.

Another research instrument with some conceptual kinship to the K-S schedule is Allport, Vernon and Lindzey's (1960) Values Test (1928). Based on Spranger's theory of psychological types, the instrument measures six value orientations: theoretical, economic, social, political, religious, and aesthetic (1928). Subjects are asked to answer 45 questions with 150 alternative answers, 25 referring to each of six values. The major drawback of this instrument is that from its inception, it has been oriented to the captive audiences of college undergraduates. Hence it is so culture-bound in the content of its items as to be wholly unusable with noncollege-educated subjects, let alone with people in relatively exotic cultures such as Yemen. Clearly, the average members of such societies could not respond to such items in the research instrument as:

13. *To what extent do the following famous persons interest you?*
 - a) *Florence Nightingale*
 - b) *Napoleon*
 - c) *Henry Ford*
 - d) *Galileo...*
21. *Are you more interested in reading accounts of the lives and works of men such as (a) Alexander, Julius Caesar, and Charlemagne; (b) Aristotle, Socrates, and Kant?*

A similar criticism can be made of Morris's (1956: 15–19) "Ways of Life" questionnaire. Whether such instruments can be redesigned for the purposes of cross-cultural research on organizational systems remains to be seen.

In short, the development and adaptation of instruments measuring value orientations not only presuppose some theoretical framework about cultural variables but also require attention to standard problems of reliability and validity as well as sensitivity to the especially difficult problems of reducing culture-bound assumptions to a minimum.

AN APPRAISAL OF CROSS-CULTURAL RESEARCH

In light of the organizationally relevant model of culture formulated above, what contributions have past studies made to our understanding of the influence of “cultural variables” on organizations? On the basis of a preliminary examination of the literature, I am persuaded by Roberts’s (1970: 347) conclusion based on her assessment of no less than 526 publications:

Most of the studies . . . are not well thought out. Empirical work . . . is not well guided by theoretical underpinnings, data are often weak, and conclusions are difficult to comprehend.

Comparative studies invoking culture are often implicit rather than explicit in their treatment of the concept and are impressionistic rather than being based on any measuring instrument that has any intersubjective reliability. Virtually no effort is made to distinguish between an independent measure of culture and an independent measure of organizational behavior. Instead, culture—without specifying any dimensions thereof—tends to be inferred from almost any contrast observed among organizations in different countries. Finally, no systematic comparisons are made between the cultural values of a sample of the population of a country and of a sample of employees of one or more organizations in order to ascertain the impact of “societal culture” versus “organizational subculture” on organizational system variables (see Chapter 17). To provide a basis for these rather sweeping criticisms, I shall briefly consider several self-designated cross-cultural organizational studies.

In his well-known study, *The Bureaucratic Phenomenon*, Crozier (1964: 216) observes a dearth of informal relationships and a “general fear of face-to-face relationships” among the employees of the Clerical Agency and the Industrial Monopoly:

These traits . . . appear, to a large extent at least, to be rather well-established French cultural traits. We cannot rely, unfortunately, upon neat comparative tests, since empirical comparative studies remain to be made. . . . The few serious anthropological studies made provide significant and concordant details in the same direction. Lucien Bernot and René Blancard, in their study of a village near Paris, note, for example: “Already among children, one discusses one of the characteristic features of Nouville’s life, the absence of groups. One does not find among the children any gang or clique within the village.”

Crozier (1964: 215) asserts in passing that the French cultural traits he observed “contrast strongly with the usual picture of the American industrial shop climate as it has been portrayed since the first experiences of the Hawthorne testroom.” This assertion illustrates the absence of an explicit cross-cultural comparison, which is also true of other studies in this area, for example, the study by England and Koike (1970) of the “personal value systems” of Japanese managers.

By contrast, there are studies comparing two or more countries that purport to be examining a cultural difference when in fact they are not. In a study of perceptions of need satisfaction of blue-collar workers in two glass factories in the United States and Mexico, belonging to the same parent company, Slocum (1971) claims to have isolated culture as an independent variable. The observed differences in perceptions of need satisfaction are attributed to the independent variable of culture, which, however, he merely postulates but does not investigate. On the other hand, Zurcher, Meadow, and Zurcher (1965) did measure a significant dimension of cultural values in Mexico and the United States, namely, Parsons' contrast between a universalistic versus a particularistic value orientation (Parsons, 1951: 180–200; Zurcher *et al.*, 1965). However, they did not relate the cultural difference they observed to any organizational system variable.

Whitehill and Takezawa (1968), in a study of samples of American and Japanese workers, have observed some significant attitudinal differences regarding authority, work, and identification with the company. They have not, however, ascertained whether the differences are a function of organizational subculture or societal culture, nor whether they are related to any objective role performance measures. Similarly, Whyte and Williams (1963) have identified what appears to be a culturally significant contrast between samples of American and Peruvian employees: among Peruvians, a positive correlation between perceived closeness of supervision and general satisfaction with the supervisor but a negative correlation between these variables among American workers. What difference this alleged cultural difference makes in organizational behavior is not investigated.

National differences were observed by Haire, Ghiselli, and Porter in the attitudes underlying management practices, the managerial role, and need satisfaction of 3,641 managers in 14 countries. Of all the attitude differences observed, 25 percent of the variance was associated with national differences that, after further analysis, prompted the authors to infer that "the cultural influence is present and substantial. It is not overwhelming" (Haire, Ghiselli, and Porter, 1966: 9). However, they did not directly measure cultural values, nor did they inquire into any organizational system consequences of the national differences of managers' attitudes. Nor did Sirota and Greenwood (1971), in their study of work goals of employees of subsidiaries of one multinational company in 25 countries, relate any observed attitudinal differences to organizational behavior. They conclude that there is

considerable similarity . . . in the goals of employees around the world. This finding has an extremely important policy implication: since the goals of employees are similar internationally, corporate policy decisions, to the extent that they are based on assumptions about employee goals, can also be international in scope? . . . In this respect, it would be interesting to determine how much of the difficulty experienced in managing employees in other countries is due not to cultural differences at all but, rather, to the automatic and psychologically self-serving assumption of differences that in reality, may be minor or even non-existent. (Sirota and Greenwood, 1971)

The warranty for such a conclusion does not yet exist. The authors evidently overlook the possible impact of the organizational subculture of a multinational corporation in generating a high level of similarity in the attitudes of employees toward work goals. As Hesselting (1971) observed:

a dominant pattern of common multinational sub-culture seems to strike many researchers. . . . From multinational headquarters certain values, attitudes and assumptions seem to be disseminated which form a layer upon the national culture and create a new identity for the bearers.

Finally, Graves (1972), in a preliminary report on a study of managerial behavior in an English and a French subsidiary of a multinational firm, seems to be sensitive to the problems of measuring cultural values and organizational behavior. He refers to having used interviews, the diary method, and a business game. Since no statistical results are reported, it is impossible to ascertain whether he has in fact made a contribution to the much-confused problem area of the relation of cultural values to organizational behavior.

A PARADIGM FOR FUTURE RESEARCH

In view of the criticisms leveled at past research purporting to measure "cultural effects," how can an application of the proposed model overcome various deficiencies? The answer admittedly is far from clear; nevertheless, I shall venture to list the desiderata of a research strategy that I think has a high probability of reliably and validly measuring cultural effects. First, a multinational or, better still, a multicultural research team is necessary to eliminate as many unconscious cultural assumptions and biases of the researchers themselves as possible. Second, a multidisciplinary team is essential to measure how much of the variance in the structure and performance of organizational systems is attributable to cultural variables, as compared with other variables such as psychological, structural, interorganizational, and societal. Third, one of the principal problems confronting a research team would be to adapt or construct research instruments, such as those mentioned above, that will tap cultural variables with a high level of reliability and validity. Fourth, the research instruments measuring cultural variables would be used on representative samples of the population of a society and the members of one or more organizations in order to measure societal culture as well as organizational subculture. Fifth, in designing sample surveys, at least two modes of cross-societal comparisons would be used: (1) intrasystemic comparisons, namely, matching domestic or national firms with those of foreign subsidiaries, distinguishing wholly owned subsidiaries from joint ventures, and controlling for various structural and industrial characteristics; and (2) intraorganizational comparisons, namely, subsidiaries of comparable size, function, and technology in different societies (Negandhi and Reimann, 1971). Sixth, in addition to sample surveys, at least two other complementary research methods

would be desirable: laboratory and field experiments to test major causal hypotheses suggested or supported by sample surveys, and the impact of cultural variables on organizational behavior and organizational system performance (Evan, 1971). And finally, Berrien's (1970: 39) nine principles, which he labels "A Super-Ego for Cross-Cultural Research," should guide the entire research process:

The best cross-cultural research is that which: (1) engages the collaborative efforts of two or more investigators of different countries, each of whom is (2) strongly encouraged and supported by institutions in their respective countries to (3) address researchable problems of a common concern not only to . . . science . . . but (4) relevant to the social problems of our times. Such collaborative enterprises would begin with (5) the joint definition of the problems, (6) employ comparable methods, (7) pool data that would be "owned" by collaborators jointly who are free to (8) report their own interpretations to their own constituents but (9) obligated to strive for interpretations acceptable to the world community of scholars.

CONCLUSION

The underlying assumption of our organizationally relevant model of culture is that an "appreciable" amount of the variance in the structure and performance of organizational systems is accountable by cultural variables. However, a significant omission in our discussion thus far is a consideration of the possible influence of time on the hypothesized relationship between culture and organizational systems. In effect, the model and the accompanying research paradigm are cross-sectional in nature. Synchronically, it seems justified to view culture as an independent variable or as a constraint on organizational systems. However, if we were to view the relationship over a time-slice, say two decades or roughly a generation, we might discover a feedback loop between organizational systems and culture. In other words, a diachronic research design may identify the influence that organizational systems have on reshaping some elements of culture, notwithstanding its high resistance to change. If such a feedback loop were discovered, it is very likely to be an indirect rather than a direct feedback loop. Mediating between organizational systems and culture are social-structural mechanisms, namely, patterns of interaction comprising the status-sets of employees in the various institutional spheres of society—the family, the economy, the polity, the religious and educational systems, and so on.

From this perspective, it is not wholly far-fetched to regard multinational corporations and international professional associations as two significant, albeit unintentional, agents of social-structural and cultural change in the years to come (see Chapter 18). These organizations not only transcend the boundaries of most nation-states but also have at their helm economic, scientific, educational, and professional elites who in turn have access to political elites. In addition, these organizations have a high commitment to economic, technological, and scientific innovation. In the course of pursuing their respective organizational

goals, be they profit, truth, or human welfare, they are unintentionally contributing to the secular process of modernization.

If the convergence theory of modernization is valid, social, political, and cultural differentiation among societies will decrease, in due course, as modernization increases throughout the world (Inkeles, 1960; Moore, 1963). To the extent that the predictive course of change occurs, the amount of cultural variance among societies will diminish, and in turn the impact of culture on organizational systems will decline.

Social Structure and Organizational Systems

In Chapter 16, social structure, the second transorganizational environment, is analyzed. By “social structure,” I refer to the patterns of behavior in a society that are manifested in the social networks arising primarily out of the “status profiles” of populations of individuals and the “organization-set profiles” of the population of organizations in a society.

After reviewing different conceptions of social structure, a social-structural model of organization is formulated. The constituents of this model are role-sets, status-sets, and status-sequences (Merton, 1957a: 368–385; Hilbert, 1990) of organizational members, organization-sets, and institutional profiles. In the course of presenting the model, 18 hypotheses are derived. The twin problems of social-structural effects on organizations and organizational effects on social structure are then discussed, along with some implications of the model for a new research strategy in organization theory.

The institutional component of our social-structural model has a direct bearing on the institutional theory of organization discussed in the Introduction to this book. If it is true, as I hypothesize, that societies differ in the social ranking of their institutions, they are also likely to differ in the social ranking of organizations associated with respective institutions. Thus, religious institutions in the former Soviet Union, for instance, which were well-nigh illegitimate until the transformations triggered by *glasnost* and *perestroika*, contrast sharply with religious institutions in Western societies, which are both legitimate and influential (Schoenherr and Vilarino, 1979).

Mapping the institutional profiles of a society by means of selected dimensions discussed in this chapter helps us generate predictions as to their impact on organizational structure, processes, and performance. It may also eventually help us bridge the analysis of social structures with the analysis of interorganizational networks (Wellman and Berkowitz, 1988).

Organizations are of course always part of a larger social structure of the society in which they occur. There is necessarily a certain variability among organizations which is a function of this wider social matrix; an American organization is never quite like a British one, even though they are nearly cognate in function. (Parsons, 1960: 44)

Most organizational researchers would probably agree with Parsons's assertion. Yet because of the interdisciplinary nature of organization theory, they would not necessarily agree that studying the relation of social structure to organizations was of either theoretical or practical significance. For one thing, the concept of "social structure" is at least as ambiguous and perplexing as the concept of "culture," which we dealt with in Chapter 15. Small wonder, then, that virtually no systematic empirical research has been undertaken on this subject, notwithstanding the appearance of several suggestive and enlightening theoretical, substantive, and methodological analyses (Stinchcombe, 1965; Udy, 1965; Glaser, 1971).

Second, a micro-level perspective (i.e., a concern with intraorganizational phenomena involving reliance on individual, interpersonal, group, or subunit levels of analysis) is still common among many organizational researchers. This, in turn, encourages a closed systems orientation to organizational phenomena in spite of the attention paid to open systems theory. Associated with this view of organizations are two contradictory assumptions that have rarely been articulated: (1) that an organization—indeed, any type of organization—is a *microcosm* of the larger society; and (2) that an organization is a type of social system with a substantial measure of *functional autonomy* from its environment.

The microcosm assumption appears to be persuasive if we consider, for example, such ubiquitous problems as the quality of leadership, the rationality of the decision-making process, and the degree of inequality in reward systems within an organization as compared with the surrounding community or the society as a whole. By studying the internal structure and functioning of an organization, the organizational researcher is in effect studying the larger and more complex phenomena of the environing society.

By contrast, the functional autonomy assumption is conducive to a conception of organizations as having generic properties, for example, hierarchical, formal attributes of structure and a tendency toward internal differentiation for the purpose of securing coordination and control. Whatever their purported objectives and whatever their interrelationships with their surroundings, organizations are conceived as having properties that transcend the culture and the social structure of the society in which they are embedded. Hence, they may be studied *as if* they are functionally autonomous.

Paradoxically, both assumptions, although mutually exclusive, encourage inattention to the encompassing social structure as it relates to organizations. Notwithstanding these assumptions, organization theory has recently witnessed a marked interest in going beyond the boundaries of organizations for the purpose of studying interorganizational relations (Evan, 1976a). If this trend persists and becomes more pervasive—and there is every reason to believe that it will—a prediction I made in 1966 may yet be borne out:

Systematic inquiry into the interactions among various types of organizations may not only unearth new intraorganizational phenomena and processes, but may also provide the wherewithal for bridging the gap between the microscopic *organizational* and the macroscopic *institutional* levels of analysis. (see page 153)

A similar view has been expressed by Hirsch (1973: 24):

The emerging subdiscipline of interorganizational relations provides a promising framework for relating the study of organizations to the larger societal setting in which they operate.

It is therefore a propitious time to consider some of the problems of linking organization theory with macro-sociological or macro-structural analysis. My purpose in this chapter is fivefold: (1) to clarify some questions concerning the organization-environment nexus; (2) to examine several alternative conceptions of social structure; (3) to develop an exploratory social-structural model of organizations; (4) to consider the implications of the model for future organizational research; and (5) to entertain some conjectures—in light of the social-structural perspective—about the design of organizations of the future.

THE ORGANIZATION-ENVIRONMENT NEXUS

Much confusion surrounds the concept of “environment” as it relates to organizations. This is due in part to the variety of theories composing the field of organization theory, each of which is located at a different point on a micro-macro continuum. Theories at the micro-end of the continuum, in which the unit of analysis is the individual or the group, are apt to focus on *internal* organizational environments. For example, “work groups are the environment in which individuals act out their roles” (Blau, 1965: 329). Theories closer to the macro-end of the continuum, in which the unit of analysis is the total organization, are likely to conceptualize some dimensions of the *external* organizational environment, for example, the state of technology in a society as it influences an organization’s functioning (Blau, 1965: 330). Our discussion will be confined to the *external* organizational environment, which, as we shall see, is in need of considerable clarification.

As evidence of the complexities involved, a recently developed typology of 64 organizational environments was based on the following six dichotomized environmental factors: complexity versus noncomplexity, routineness versus nonroutineness of “a problem-opportunity state,” presence of organized versus unorganized elements, direct versus indirect relationship of environmental elements, high versus low change rate, and stable versus unstable change rate (Jurkovich, 1974).

The proliferation of terms pertaining to different dimensions of the environment impinging on organizations is a reflection of the growing pains of

organization theory as it becomes increasingly macro-oriented. Which of the various concepts will survive the test of time will be determined largely by their heuristic value. To illustrate some of the ambiguities involved, I shall consider in turn the following concepts: context, organizational domain, task environment, social setting, and societal environment.

Context

The Aston group's well-known study of comparative organizations has identified such *structural* variables as concentration of authority, structuring of activities, and line control of work flow, which they have interrelated with what they call "contextual" variables (Pugh *et al.*, 1969). They have since replicated some of their findings pertaining to the interrelationships of contextual and structural variables in the United States, Canada, and Japan (McMillan, 1973; Hickson *et al.*, 1974). It is, however, by no means clear what the authors mean by "context," or how this term differs from the external organizational environment. In one publication they report that they scaled "eight salient elements of context": age, size of organization, size of parent organization, operating variability, operating diversity, work flow integration, number of operating sites, and dependence (Pugh *et al.*, 1969: 111). With the exception of the variable of dependence, which is manifestly an interorganizational variable, all the variables could just as well be conceptualized as *structural* rather than *contextual* in nature. Organizational technology (work flow integration), for example, is clearly distinguishable from the state of knowledge, skill, and resources composing the technological institutions in the society as a whole; it has, in fact, been conceptualized by other researchers as a *structural* variable (Heydebrand, 1973a: 21–22). In one passing remark, the authors acknowledge that context as "a concept which, though in some respects is narrower than that of environment, is still very wide" (Pugh *et al.*, 1969: 111). Elsewhere, some members of the Aston group equate their contextual variables with the "task environment" and then use the expression "contextual 'task environment'" (Hickson *et al.*, 1958: 409–443), which is hardly consistent with the usage of Dill (1958) or Thompson (1967).

Organizational Domain

The concept of organizational domain, introduced by Levine and White (1961) as part of their exchange framework for studying interorganizational relations, raises some kindred problems. The authors define the domain of an organization as "the specific goals it wishes to pursue and the functions it undertakes in order to implement its goals" (Levine and White, 1961: 597). In the health agency system Levine and White studied, organizational domain was operationalized "in terms of (1) disease covered, (2) population served, and (3) services rendered." By the same token, a university's domain may be formulated, in general terms, as teaching, research, and public service, or, in more specific terms, as teaching

and research with a special focus on science, engineering, and public service by contributing to the advancement of the technological capability of the society. Thus formulated, it is hard to differentiate an organization's domain from the primary goal(s) and task structure of organizations; hence, it need not be construed as an environmental variable. However, the authors' related term of "domain consensus," by which they mean the acceptance of the legitimacy of an organization's domain by enviroing organizations, does qualify as an environmental variable or more specifically as an interorganizational variable. Within the framework of my organization-set model (see Chapters 9 and 10), domain consensus refers to the attitudes of members of the organization-set toward the focal organization.

Task Environment

The third environmental concept, task environment, was first developed by Dill (1958) and was subsequently adopted by Thompson (1967). Although it has acquired other meanings akin to an organizational domain, Dill's (1958: 410) definition is as follows: "I have denoted that part of the total environment of management which was potentially relevant to goal setting and goal attainment as the task environment." In his study of two Norwegian firms, Dill (1958: 424) found that four components of the task environment were of primary significance: "*customers* (both distributors and users), *suppliers* (of materials, labor, equipment, capital and work space), *competitors* (for both markets and resources), and *regulatory groups* (government agencies, unions and interfirm associations)." In other words, the task environment includes all organizations and others (such as consumers) on whom an organization depends for essential resources and with whom it enters into transactions entailing cooperation, competition, and regulation. Except for unorganized customers, the task environment is an equivalent concept to the input organization-set and to the output organization-set of the focal organization.

Social Setting

Although the task environment has the hallmarks of a useful concept, the question may now be raised as to whether organizational researchers can afford to confine their research to this level of the organizational environment. In Chapter 15, I argued that organizational researchers should include cultural factors in their research because it probably accounts for an appreciable amount of the variance of any major dependent variable such as organizational performance. In effect, I was making a case for the need to go *beyond* the task environment in assessing the impact of environmental variables on organizations. Udy (1965: 687) acknowledges this need in formulating his concept of the social setting: Every organization is located in some society, is subject to its social cultural influence, and in turn can influence the society. In this sense, one thinks of any organization as existing within a *social setting*. Without further elaborating the

dimensions and mechanisms of the “social setting,” this concept is too global and too complex to be incorporated in any research design.

Societal Environment

Negandhi (1973: 315) has also recognized the importance of transcending the task environment, which he conceives as but one of three relevant environments for organizational research, the other two being the “organizational environment”—which is equivalent to my use of the term “internal organizational environment”—and the “societal environment. According to Negandhi (1973: 287, 315), “societal environment” is the “macro-environment . . . in a given nation,” and he uses it synonymously with “environmental conditions,” which he defines as “social-economic, educational, political, legal and cultural factors which impinge upon the firm’s internal operations but are external to the firm.” With the help of the Farmer-Richman (1965) model of comparative management, Negandhi (1973: 285–312) has included societal environment variables in his cross-national research. The results of his ongoing cross-national research will provide a basis for assessing the heuristic value of his approach to conceptualizing the “societal environment.”

Generalizing Contingency Theory

Several conclusions may be drawn from this brief discussion of the organization-environment nexus. First, it is important to delineate different types and levels of the external organizational environment. Second, as crucial as the task environment appears to be, it is not sufficient if organizational researchers want to maximize the amount of variance they can account for in their research. Third, transcending the task environment requires the inclusion of the culture and the social structure of a society, both of which are combined in Udy’s concept of social setting and in Negandhi’s concept of societal environment. Unless organizational researchers become more explicit and systematic in identifying and measuring different levels of the environment, including the macro-social structural level, they will not succeed in explaining cross-societal variations in (1) organizational structure, (2) organizational processes, and (3) organizational effectiveness. Otherwise put, there is a need to *generalize* the contingency theory formulated by Lawrence and Lorsch (1967) to include culture and social structure.

ALTERNATIVE CONCEPTIONS OF SOCIAL STRUCTURE

The organizational researcher who turns to the literature on macro-theories in sociology, anthropology, and political science will discover a marked absence of consensus, both within and between disciplines, concerning the concept of social structure.¹ By way of introducing the organizational researcher to some

¹ Cf. Seldond and Moore (1968: 5); Boudon (1971: 4–5); and Vallier (1971: 227).

of the vagaries as well as to the potentialities of this concept, I shall begin by quoting 10 definitions of this term by anthropologists and sociologists:

Radcliffe-Brown: Human beings are connected by a complex network of social relations. I use the term "social structure" to denote this network of actually existing relations. . . . Social phenomena constitute a distinct class of natural phenomena. They are all, in one way or another, connected with the existence of social structures, either being implied in or resulting from them. Social structures are just as real as our individual organisms. What is meant by social structure is any arrangement of persons in institutionalized relationships. (Radcliffe-Brown, 1952: 190; Radcliffe-Brown and Forde, 1950: 43)

Nadel (1957: 12, 153): We arrive at the structure of a society through abstracting from the concrete population and its behavior a pattern or network (or "system") of relationships obtaining "between actors in their capacity of playing roles relative to one another." . . . It seems impossible to speak of social structure in the singular. Analysis in terms of structure is incapable of presenting whole societies; nor, which means the same, can any society be said to exhibit an embracing, coherent structure as we understand the term. There are always cleavages, dissociations, enclaves, so that any description alleged to present a single structure will in fact present only a fragmentary or one-sided picture.

Firth (1951: 31): The concept of social structure is an analytical tool designed to serve us in understanding how men behave in their social life. The essence of this concept is those social relations which seem to be of critical importance for the behavior of members of the society so that if such relations were not in operation, the society could not be said to exist in that form.

Lévi-Strauss (1963: 279): The term "social structure" has nothing to do with empirical reality but with models which are built up after it. This should help one to clarify the difference between two concepts which are so close to each other that they have often been confused, namely, those of *social structure* and those of *social relations*. It will be enough to state at this time that social relations consist of the raw materials out of which the models making up the social structure are built, while social structure can, by no means, be reduced to the ensemble of the social relations to be described in a given society.

Parsons (1951: 25, 114): Since a social system is a system of processes of interaction between actors, it is the structure of the *relations* between the actors as involved in the interactive process which is essentially the structure of the social system. . . . A social system is, with respect to its structurally significant components, a *differentiated* system. . . . It is a system of differentiated roles. The types of which it is composed, how they are distributed within the social system and how integrated with each other

must be analyzed. This is what we mean by the social structure in the narrower sense of the term.

Smelser (1968: 148, 150): At the most general level "social structure" as a construct is used to characterize recurrent and regularized interaction among two or more persons. . . . The basic units of social structure are not persons as such, but selected aspects of interaction among persons. The concepts that are used to characterize this level of analysis are the familiar sociological concepts of "role," "organization," and "institution."

Udy (1965: 489): We shall define "social structure" very broadly as the totality of patterns of collective human phenomena that cannot be explained solely on the basis of human heredity and/or the nonhuman environment.

Sheldon and Moore (1968: 5): The uses of the term [social structure] range from the very inclusive concept of any *pattern of action or relationship* . . . to the very restrictive concept of *social differentiation*, particularly with respect to status inequalities. It is also possible to view structures as *social systems*—complete with values and norms and motivated actors playing prescribed roles—or at another extreme, as a set of statistical categories—the age structure of a population, the occupational structure of the labor force.

Merton (1957a: 162, 370): By social structure is meant that organized set of social relationships in which members of the society or group are variously implicated. . . . The patterned arrangements of role-sets, status-sets and status-sequences can be held to comprise the social structure. The concepts remind us . . . that even the seemingly simple social structure is extremely complex. For operating social structures must somehow manage to organize these sets in sequences of statuses and roles so that an appreciable degree of social order obtains, sufficient to enable most of the people most of the time to go about their business of social life without having to improvise adjustments anew in each newly confronted situation.

Stinchcombe (1965: 142): I intend to interpret the term "social structure" . . . in a very general sense to include groups, institutions, laws, population characteristics, and sets of social relations that form the environment of the organization. That is, I interpret "social structure" to mean any variables which are stable characteristics of the society outside the organization.

Juxtaposing these definitions highlights the variety of assumptions and types of framework current in macro-theory in sociology and anthropology. Conceptions of social structure differ in scope, unit of analysis, and type of referent. Some are highly abstract and entail a comprehensive model of society, whereas others are substantially lower on the scale of abstraction; some imply a unit of analysis that is the total society in contrast to others that imply subsocietal units; some postulate that a society has a unitary social structure, whereas others assume that society is composed of multiple social structures. These differences,

it turns out, are at the root of various controversies on macro-theory in the social sciences (Pool, 1967; Vallier, 1971; Boudon, 1971: 140–141).

Radcliffe-Brown, a leader of the British school of social anthropology, subscribed to a concept of social structure that is moderately abstract and empirical in its orientation. On the other hand, Nadel's view was more complex and variegated, particularly in his treatment of role structures (Nadel 1957). For Parsons as well as Lévi-Strauss, social structure is a highly general and abstract concept concerning social systems, for the former, and collective representations, for the latter (Swanson, 1971). In contrast to Parsons and Lévi-Strauss, Merton's approach to social structure is governed by a strategy of middle-range theory construction. Instead of theorizing about social systems or collective representations, Merton concentrates on more circumscribed subjects, such as a theory of status and role structures and a theory of the institutions of science.

From the vantage point of developing linkages between organization theory and macro-social theory, Merton's conception of social structure and, to some extent, Stinchcombe's as well, offer some highly promising leads. In developing his three social-structural concepts of role-sets, status-sets, and status-sequences, Merton in effect provides us with some of the mechanisms for linking micro- and macro-levels, a problem "of central importance to the development of sociological theory" (Granovetter, 1973).

Three noteworthy developments may contribute to an eventual solution to the problem of linking micro- and macro-levels—including organization theory with macro-sociological theory. First, since the mid-1960s, there has been a rapidly growing field of interest in "social indicators" (Bauer, 1966; Sheldon and Moore, 1968). The impetus for what has become known as the "social indicator movement" in the United States and elsewhere is the growing demand for information systems to monitor social changes and to evaluate public policies, plans, decisions, and programs (Shonfield and Shaw, 1972; Klages, 1973; Aidenoff and Johnston, 1974). Along with the policy-oriented work on social indicators is a concern of some social scientists with constructing analytic indicators for the purpose of modeling social systems (Sheldon and Land, 1972; Carlisle, 1972). A cognate line of inquiry that is also likely to contribute to operationalizing dimensions of social structure is the comparative analysis of national aggregate data, developed principally by political scientists (Merritt and Rokkan, 1966; Taylor, 1968; Taylor and Hudson, 1972).

Second, since the early 1950s, several British social anthropologists, following the pioneering work of Barnes (1954), have been analyzing "social networks" in urban communities as well as in preliterate societies (Mitchell, 1969; Boissevain and Mitchell, 1973). They have sought to translate the notion of a social network, on which Radcliffe-Brown, Nadel, and others based their conceptions of social structure, into more precise terms with the help of graph theory. The common use of the term "network" is "purely metaphorical and is very different from the notion of a social network as a specific set of linkages among a defined set of persons, with the additional property that the characteristics of these linkages as a whole may be used to interpret social behavior of the persons involved" (Mitchell, 1969: 1–2). Following Bott's (1957) distinction between loose-

knit and close-knit social networks, other social anthropologists have sought to develop various measures of formal properties of networks such as reachability, density, range, and connectedness (Mitchell, 1969: 12–20; Barnes, 1969).

Third, still nascent as a trend is the growing recognition of the importance of using the formal organization as a fundamental subsocietal unit in macrosociological research (Vallier, 1971: 213–216). In his analysis of the impact of the level of literacy, degree of urbanization, the presence of a money economy, the occurrence of political revolution, and the level of past organizational experience on the rate of formation and the likelihood of success of new organizations in a society, Stinchcombe (1965: 145–169) has already demonstrated the potential value to macrosociology “as well as to organization theory” of this mode of analysis. Likewise, Turk (1970, 1973) has provided some evidence for the utility of using an interorganizational approach in studying urban communities.

Are any of the foregoing ideas useful for developing a provisional social-structural model of organizations?

AN EXPLORATORY SOCIAL-STRUCTURAL MODEL OF ORGANIZATIONS

In presenting the organization-set model (see Chapters 9 and 10), I have already indicated the potential theoretical and empirical value of applying and extending Merton's (1957a) concept of the role-set. In developing a provisional model linking any formal organization with the social structure of the environing society, I shall explore some implications of Merton's three constituents of social structure in conjunction with several related ideas.

To begin with, the social system of any society may be conceptualized as involving four nested concepts commonly used by sociologists and other social scientists: norms, roles, organizations, and institutions. Norms are prescriptions or proscriptions of conduct; roles consist of regularized (or institutionalized) patterns of behavior associated with various statuses or positions in a social system; organizations, regardless of type or purpose, consist of a structure of roles, whose incumbents tend to behave in accordance with organizational norms and goals; and institutions (or institutional spheres or sectors) consist of an ensemble of roles and organizations whose principal function is to maintain a social system in a steady state. When we observe role behavior and organizational behavior—or their residues—we are dealing with *interactional* phenomena at a relatively microlevel of analysis. When we aggregate role behavior and organizational behavior or clusters of roles and organizations, we are dealing with *institutional* phenomena at a relatively macrolevel of analysis. Merton's three concepts of social structure and my concept of organization-set may be conceptualized as linkage mechanisms between the macro- and the micro-levels of analysis. I shall discuss each of these linkage mechanisms before considering the institutional structure of a society as it impinges on organizations.

Role-Sets

Merton (1957a: 369) defines role-sets as the “complement of role relationships which persons have by virtue of occupying a particular social status.” Since each member of an organization in the course of performing his or her role recurrently interacts with a number of “role partners,” the resulting social network within an organization, even one with only 100 members, can be quite complex. By allocating different amounts of authority to different roles in the organization, the resulting hierarchical structure tends to limit the complexity of the network of role interactions. And by specifying and formalizing the nature of the behavior required of the occupants of various statuses in an organization—particularly one that is bureaucratic in structure—an organization seeks to deactivate the extraorganizational roles of members, namely, the latent social roles, which are deemed irrelevant (Gouldner, 1957, 1958).

An organization's role structure is further differentiated, according to Parsons (1960: 59–62), into three hierarchical levels: (1) the “technical” level, the status-occupants of which carry out the primary task of the organization; (2) the “managerial” level, where the function of status-occupants is “mediation between the organization and the external situation, and ‘administration’ of the organization's internal affairs”; and (3) the “institutional” level, the locus of which is the board of directors or trustees, where the status-occupants are concerned with securing legitimacy and support from the environment. Even at the technical level in an organization's hierarchy, some members engage in external relations in the course of performing their roles, as is true of various professionals employed in universities, hospitals, research organizations, industrial organizations, and government agencies who are also active in their professional associations. Hence, at each of the three hierarchical levels we would expect to find boundary personnel, although the ratio of boundary roles to nonboundary roles probably increases from the technical level through the managerial to the institutional level (see Chapters 9 and 10).

If Parsons's three categories of role structure, which appear to be quite general, are combined with the two types of organization-sets, that is, input and output, we have a typology of six boundary roles. Organizations differ, no doubt, in the frequency distributions of boundary personnel according to the six types and, in general, in the role-set profiles of all their members.

Industrial organizations, for example, employ a multitude of specialists in boundary as well as in nonboundary roles (Boddewyn and Kapoor, 1972). Some specialists in engineering, finance, law, personnel, and industrial relations perform input boundary roles; others in economics and marketing perform output boundary roles; and still other specialists perform a mixture of both types of roles. Since some type of expertise is generally required to mediate between an organization and its environment, the higher the ratio of boundary to nonboundary roles, the higher the proportion of professionally trained members in an organization.

Several hypotheses concerning a number of pivotal variables in organization theory such as organizational structure, processes, and effectiveness² follow from these considerations:

Hypothesis 1: *Organizational effectiveness is a function of both the number and the quality (expertise) of personnel distributed in each of the six types of boundary roles.*

Hypothesis 2: *If the ratio of boundary to nonboundary roles of the organization's elite is not appreciably higher than that of rank-and-file members, the level of organizational effectiveness is likely to be impaired.*

Hypothesis 3: *Since high ratios of boundary to nonboundary roles, particularly at managerial and institutional levels in the hierarchy, are likely to involve employment of a substantial proportion of professionally trained personnel, this will be conducive to the use of "universalistic" rather than "particularistic" criteria for recruitment, and to the reliance on informal rather than formal socialization of members and communication among members.*

Hypothesis 4: *A high ratio of boundary to nonboundary roles is likely to require tasks with a significant discretionary component, and hence will tend to be associated with a low level of formalization of rules and a low level of centralization of decision making.*

Clearly, the role-sets of each of the boundary persons in an organization constitute various linkages—principally through the medium of the organization-set—with the environing community and the society at large.

Status-Sets

It is the status-set, however, that serves as a direct linkage mechanism between the organization and the wider society. By this term, Merton (1957a: 380) means "the complex of distinct positions assigned to individuals within and among social systems." Merton's use of the term "social system" in this context can safely be interpreted as "institutions" or "institutional spheres." Each member of a society has one or more statuses with respect to such institutional spheres as the family, the economy, the polity, religion, education, and the law. For example, Mr. X is married, a corporate executive, a Republican, a Protestant, an alumnus of Princeton University, and a law-abiding citizen. Mr. Y is a divorcee, a salesman, a Democrat, a Catholic, a high-school graduate, and a citizen who has been convicted of a crime. These are obviously rather simple, almost impoverished status-sets. Typically, individuals in modern societies have, in each of the six institutional spheres mentioned, several statuses that result in status-sets—and accompanying role-sets—that are far more complex. For instance, as regards the family institution alone, one can, of course, simultaneously have

² For purposes of the present discussion, "organizational structure" is used in a manner analogous to that used by the Aston group; see Pugh *et al.* (1968) and Blau and Schoenherr (1971). The same three organizational processes—recruitment, socialization, and communication—have been selected as were used in Chapter 15. The concept of organizational effectiveness is employed in a multidimensional sense of productivity, profitability, performance, and so on. For a systematic treatment of this concept, see Chapter 22.

the status of a son, a brother, a father, and an uncle. And with respect to each of these statuses, one would have a different role-set. Nevertheless, it is reasonable to assume that individuals vary greatly in their status-sets, some having rather simple ones and others having highly complex status-sets.

Another basis for distinguishing status-sets is the social evaluation or prestige ranking of its various components. Just as the members of various societies assign different prestige rankings—in a fairly uniform manner—to different occupations, so they are also likely to make similar distinctions as to the value of, say, different types of political party affiliations, religious affiliations, levels of education attainment, and the like (Inkeles and Rossi, 1956). Thus, some individuals may have relatively prestigious status-sets, whereas others may have relatively nonprestigious status-sets. There are, of course, individuals—perhaps a large proportion of the population in rapidly changing modern societies—whose status-sets do not have consistent prestige rankings. Such individuals are likely to be exposed to multiple role strains and to role-set conflicts in one or more of their social statuses (Merton, 1957a: 371–380; Goode, 1960).

Turning now to the status-set profiles of the members of an organization, I hypothesize that:

Hypothesis 5: *The status-sets of organizational elites, compared to those of rank-and-file members, are higher in complexity and in level of prestige.*

Hypothesis 6: *The status-occupants of the six boundary roles are all apt to have more complex and more prestigious statuses than members performing nonboundary or internal roles.*

In addition, I would expect organizations of a given type that are ranked high in society to have members with status-set profiles higher in degree of complexity and prestige than those of members of organizations that are ranked low (Stinchcombe, 1965: 171–176). The corollary of this hypothesis is an association between the prestige ranking of organizations and the prevalence of cosmopolitan versus local role orientations among members (Gouldner, 1957, 1958). For example, prestigious universities are likely to have a high proportion of their faculty who have cosmopolitan role orientations—in part because of their complex status-sets—whereas nonprestigious universities are likely to have a predominance of local role orientations among their faculty members.

Another way of formulating some of the organizationally structured differences in status-set profiles is as follows:

Hypothesis 7: *Members of an organization, particularly at managerial and institutional levels in the hierarchy, tend to become involved in highly complex role-sets in their intraorganizational as well as extraorganizational roles. If their status-sets are relatively prestigious, they are motivated to engage in a great range of interactions in their various statuses that often, directly or indirectly, enhance their organizational role performance and in turn contribute to the organization's level of effectiveness.*

A case in point is the corporate executive who is elected to the board of directors of his own company and to the boards of trustees of hospitals, universities,

foundations, and so on. As a result of his interlocking directorships, he is likely to become privy to various bodies of "inside information" that may help him perform his role as a corporate executive (Evan and Levin, 1966). That this example is not entirely hypothetical is evident in a recent study of the Du Pont Company (Phelan and Pozen, 1973). Du Pont executives or family members are directors of major corporations as well as of 90 nonprofit organizations in Delaware, including various types of community organizations, hospitals, social service agencies, colleges and universities, and private foundations (Phelan and Pozen, 1973: 9–13).

In short, organizations differ in the status-set profiles of their members. Moreover, the consequences of members' status-sets for such organizational processes as recruitment, socialization, and communication have not eluded organization theorists and practitioners, as Barnard (1938: 224)—whose own status-set included both of these roles—makes clear:

The general method of maintaining an informal executive organization is so to operate and to select and promote executives that a general condition of compatibility of personnel is maintained. Perhaps often and certainly occasionally men cannot be promoted or selected or even must be relieved because they cannot function, because they "do not fit," where there is no question of formal competence. This question of "fitness" involves such matters as education, experience, age, sex, personal distinctions, prestige, race, nationality, faith, politics, sectional antecedents.

In terms of our dimensions of status-sets, Barnard's assertion suggests that:

***Hypothesis 8:** As the status-sets of organizational elites increase in degree of complexity and prestige, there is a tendency for the recruitment of executives to become more "particularistic," which in turn is conducive to informal rather than formal socialization and communication.*

Status-set profiles of members also affect various dimensions of organizational structure as well as the level of organizational effectiveness. Thus:

***Hypothesis 9:** The more complex and more prestigious the status-set profiles of members, especially at the managerial and institutional levels in the hierarchy, the greater the degree of discretion required to perform the role and hence the lower the degree of formalization of rules and the lower the degree of centralization of decision making.*

***Hypothesis 10:** As the complexity and prestige of the status-set profiles in an organization increase, there is a higher probability that various types of resources will be mobilized and thereby increase the level of organizational effectiveness.*

Status-Sequences

Neither role-sets nor status-sets are static, of course; changes occur as individuals move through the life cycle, relinquishing old roles and acquiring new roles and new organizational memberships. This process, designated as "status-sequences," is defined by Merton (1957a: 382) as the "succession of statuses

through which an appreciable proportion of people move." For example, in France, graduates of the École Polytechnique typically fill major administrative posts in government and industry; in England, graduates of Harrow, Eton, Winchester and other prominent public schools "capture most of the places at the preeminent universities, Oxford and Cambridge, and, through what is called 'the old boy network,' go on to influence and power in government, the armed forces, the church, the diplomatic corps and the major banks and businesses" (Stern, 1973: 41). And according to the Du Pont study, "Du Pont Company directors have historically married Du Pont women" (Phelan and Pozen, 1973: 113). Examples can be multiplied of status-sequences that are sufficiently common as to be socially patterned: lawyers embarking on political careers, retired military officers becoming corporate executives, particularly in companies seeking defense contracts, members of major law firms becoming judges, and so on (Biderman, 1971; Phelan and Pozen, 1973: 154-155).

From an organizational perspective, status-sequences in the role-set profile and in the status-set profile of the membership can have important consequences for an organization's structure, processes, and effectiveness. The entry and exit of members not only change the role-sets of the membership but may also affect the welfare of an organization. New members, recruited because of special expertise and access to relatively inaccessible channels of information, may be the impetus for significant innovations of a technical or of an administrative nature (see Chapter 11). For example, an ex-general appointed as a top executive of a corporation may modify the staff-line structure to approximate that of the military, and a scientist or an engineer hired by a company may spark a new invention. On the other hand, employees who resign or who are dismissed can be a source of grief to the organization they have left behind because of the "trade secrets" they may possess, which accounts for the contracts some companies require their employees to sign imposing restrictions on an employee's disclosure and use of proprietary information upon termination of employment (Phelan and Pozen, 1973: 427-428). Likewise, adherents of religions who become apostates and party members who become renegades or turncoats can be embarrassing or even injurious to their former organizations.

Apart from resignations and dismissals, role-set sequences in an organization are occasioned by promotions, demotions, and lateral reassignments. In the case of boundary roles, particularly at the managerial and institutional levels, such changes may adversely affect the effectiveness of the focal organization because of the lead time often required to develop new relationships with role partners belonging to organizations composing the organization-set. To specify the probable consequences of a high rate of status-sequences in the role-set, the following hypotheses are formulated:

Hypothesis 11: A high rate of role-set sequences in boundary roles, especially those involving managerial and institutional personnel, is inversely related to organizational effectiveness.

Hypothesis 12: Organizations in which role-set sequences of boundary roles are high will tend to respond to the problems of discontinuity that are generated by (1) increasing the centralization of decision making; (2)

increasing the formalization of rules; and (3) relying on particularistic criteria for recruitment and formal modes of socialization and communication.

Status-sequences in a member's status-set—and cumulatively in the status-set profile of the membership of an organization—are much less visible and less subject to control by an organization's elite than are the role-set sequences of members. Yet in some societies management does intervene in the status-sets of its members. For example, in Japan, the foreman in an industrial organization often takes an active interest in the family problems of his subordinates; in Communist countries, the manager of an enterprise is not unconcerned about the political activities of employees; and in the United States, some companies encourage their employees, especially managers, to participate in various community organizations to ensure that the views of the business community are properly represented.

In a well-known participant-observer study of four firms, Dalton (1959: 181, 185) found that in one of them, "Masonic membership was usually an unofficial requirement for getting up [the managerial ladder]—and for remaining there," and that membership in the local yacht club "aided a candidate who had other things in his favor." Acquiring an advanced degree often helps an employee obtain a promotion in his company, and joining a prestigious church may have a similar effect. On the other hand, having a serious brush with the law may induce an employer to dismiss an employee for fear that the company will become a target of adverse publicity. In other words, status-set sequences involving charges of a political, familial, educational, religious, or legal nature may affect an individual's position in an organization, although officially such changes in latent social roles may be regarded as irrelevant to an organizational role. The executives of some organizations may, however, unofficially evaluate such changes to ascertain whether they increase or decrease the level of prestige of an individual's status-set and enhance the person's organizational role performance.

Analogous to the hypotheses concerning role-set sequences, the following hypotheses may be formulated pertaining to status-set sequences:

Hypothesis 13: *Status-set sequences involving an increase in prestige of boundary personnel, especially of those located at the managerial and technical levels of the hierarchy, are positively associated with organizational effectiveness.*

Hypothesis 14: *Status-set sequences involving an increase in prestige of boundary personnel, especially of those located at the managerial and technical levels in the hierarchy, tend to be associated with (1) particularistic criteria of recruitment; (2) an informal mode of socialization and communication; (3) a decrease in the centralization of decision making; and (4) a decrease in the formalization of rules.*

Organization-Sets

Almost as invisible as the status-set sequences of members of an organization are the various properties of organization-sets, a concept I have defined as the

complex of environing organizations with which a given organization or class of organizations—referred to as the focal organization—recurrently interacts in the course of pursuing its objectives (see Chapters 9 and 10). This concept is further subdivided into an input set, from which the focal organization obtains its various resources, and an output set, through which the focal organization channels its output, be it goods, services, influence attempts, authoritative decisions, or whatever. Like status-sets, which link individuals to the various institutional spheres of a society, organization-sets link organizations to different institutional spheres. Organization-sets resemble status-sets in yet another respect, namely, they vary greatly in complexity—some are relatively simple and others are immensely complex as regards, for example, the number of elements in the set, the locus of organizational interaction, and the network configuration in its input and output sets.

To illustrate the possible range of variation of organization-sets, let us first consider a feeder plant in the Detroit area that manufactures parts for General Motors. It has a *relatively* simple organization-set. Its input organization-set consists of several suppliers of raw materials, one or more banks from which to borrow capital, a trade union with which it enters into a collective bargaining agreement, and some local, state, and federal agencies that enforce regulations affecting the operations of the factory. Its output organization-set consists principally of GM, to which it sells its products, and the Internal Revenue Service and some local and state agencies to which it pays taxes. The locus of its organizational interactions is primarily in the local area, except for the IRS, the state taxing agencies, the regulatory agencies, and possibly the suppliers. Its network configuration is simple not only because of the size of the input and output sets but also because of the type of elements in the sets, namely, organizations, each of which directly interacts with the focal organization but none with one another. As a result, the focal organization can concentrate on *first* order, rather than on *second* or higher order, interactions with elements of its input and output sets.

By contrast, GM, with which the feeder plant interacts, presents a higher level of interactional complexity by several orders of magnitude. Its input and output sets probably number many thousands of highly diverse organizations; the locus of its organizational interaction is national as well as international—in fact, in several dozens of countries throughout the world—and it is enmeshed in a multiplicity of complex organizational networks with second and higher order interactions with elements of its input and output sets. Clearly, GM's organization-set serves as a major linkage mechanism for innumerable organizations in the United States and many other countries.

Two of the various dimensions of the organization-set exemplify its societal linkage function, on the one hand, and, on the other hand, its consequences for the structure, processes, and effectiveness of the focal organization: (1) the size of the organization-set; and (2) the extent of its institutional interpenetration. These two dimensions, along with others, may be used as measures of the organization-set profile of the focal organization.

The size of the organization-set is very likely associated with the magnitude of the *resources* at the disposal of the focal organization and with its capacity to *sanction* elements of its organization-set, that is, the power to reward or punish them for their actions. The sanctioning power of an organization is in large measure a function of its resources. These two attributes of the focal organization vis-à-vis its organization-set are also fundamental features, as we shall see presently, of each of the institutions of society. In this respect, the organization-set in action resembles the functioning of an institution.

A high concentration of resources and sanctioning capacity on the part of the focal organization tends to enlarge its institutional interpenetration, by which I mean the scope or magnitude of interactions that the focal organization has through its organization-set with diverse institutional spheres at the local or national levels of a society. Having multiple linkages through its organization-set with organizations associated, for example, with political, economic, educational, religious, and legal institutions, protects the focal organization against threats to its survival. It also protects its claims to autonomy in its decisions with respect to inputs and outputs.

The foregoing considerations suggest certain specific hypotheses concerning the relation of the organization-set to the structure, processes, and effectiveness of the focal organization:

Hypothesis 15: *The size of the organization-set is directly related to*

- a. *Centralization of decision making*
- b. *Formalization of rules*
- c. *Formal mode of socialization and communication*
- d. *Organizational effectiveness*

Hypothesis 16: *The extent of institutional interpenetration of the organization-set is directly associated with*

- a. *Centralization of decision making*
- b. *Formalization of rules*
- c. *Formal mode of socialization and communication*
- d. *Organizational effectiveness*

To summarize our discussion of the *interactional* components of the social-structural model of organizations, namely, the effects of role-sets, status-sets, status-sequences, and organization-sets, I have presented in Table 16.1 virtually all the hypotheses that have been formulated. Each hypothesis presupposes the usual *ceteris paribus* condition. Cumulatively, the four social-structural components may be thought of as an "organizational environment" profile for which a composite index might be developed based on such variables as I have used in discussing each of the components.

Institutional Structure

We now turn to the *institutional* component of our social-structural model of organizations. This level of analysis involves a process of aggregating the role

Table 16.1 Hypotheses on the Relationship Between the Organizational Environment Profile, Organizational Structure, Organizational Processes, and Organizational Effectiveness

Selected Organizational System Dimensions	Organizational Environment Profile					
	Role-Set Profile				Status-Set Profile	
	Boundary Roles		Boundary Roles of Organizational Elites		Complexity of Organizational Elites' Status-Sets	
	Nonboundary Roles		Boundary Roles of Rank-and-File			
	Low	High	Low	High	Low	High
1. Organizational structure						
Centralization of decision making						
Low (or decreasing)		X		X		X
High (or increasing)	X		X		X	
Formalization of rules						
Low (or decreasing)		X		X		X
High (or increasing)	X		X		X	
2. Organizational processes						
Recruitment						
Particularistic	X		X			X ^a
Universalistic		X		X	X ^a	
Socialization						
Formal	X		X		X	
Informal		X		X		X
Communication						
Formal	X		X		X	
Informal		X		X		X
3. Organizational effectiveness						
Low	X		X		X	
High		X		X		X

^a These hypotheses refer only to the recruitment of executives or organizational elite.

behavior of a population of individuals and the organizational behavior of a population of organizations in a society. This poses a perplexing problem for social scientists for, assuming one can obtain the relevant data for a society such as the United States, how does one aggregate the role behavior of a population of over 200 million people and a population of organizations that includes 1,733,000 corporations, 78,269 governmental units, 329,299 religious organizations, and 17,000 "trade associations, professional societies, labor unions, fraternal and patriotic organizations, and other types of groups consisting of voluntary mem-

Table 16.1 Hypothesis on the Relationship Between the Organizational Environment Profile, Organizational Structure, Organizational Process, and Organizational Effectiveness (Continued)

Organizational Environment Profile									
Status-Set Profile		Status-Sequence Profile				Organization-Set Profile			
Prestige of Organizational Elite's Status-Sets		Rate of Role-Set Sequences of Boundary Roles		Status-Set Sequences Involving an Increase in Prestige of Boundary Roles		Size		Extent of Institutional Interpenetration	
Low	High	Low	High	Low	High	Small	Large	Small	Large
	X	X			X	X		X	
X			X	X			X		X
	X	X			X	X		X	
X			X	X			X		X
	X ^a		X		X	X		X	
X ^a		X		X			X		X
X			X	X			X		X
	X	X			X	X		X	
X			X	X			X		X
	X	X			X	X		X	
X			X	X		X		X	
	X	X			X		X		X

bers" (U.S. Bureau of the Census, 1974: 46, 477; U.S. Census of Governments, 1973: vi; Fisk, 1973: 7)?

Macro-theorists who have analyzed institutions have scarcely concerned themselves with the problem of linking *interactional* data with *institutional* data. Nor have they critically evaluated the relative merits of alternative approaches to classifying institutions (Marx, 1904: 11-13; Hertzler, 1946; Parsons and Smelser, 1956: 18-28; Eisenstadt, 1963: 376-378). Under the circumstances, I shall fall back on the six types of institutions I mentioned in connection with the analysis

of status-sets (i.e., familial, economic, political, religious, educational, and legal); these institutions have also been referred to in the literature as “subsystems” or “systems” in a society. Other institutions, of course, could be added to this list (e.g., military, technological, and scientific institutions), but these six will suffice for our purpose, which is to delineate the *institutional* components of a social-structural model of organizations.

Two noteworthy contributions toward developing a macro-structural analysis of organizations have been made, one by Farmer and Richman (1965: 15–45) and the other by Stinchcombe (1965). In their research on comparative management, Farmer and Richman (1965: 29–30) have identified four classes of environmental constraints: educational-cultural, sociological-cultural, political-legal, and economic. With respect to each of the four categories, they have developed a list of strategic factors—a total of 29—that are potential measures of their “environmental constraints.” Proceeding on the hypothesis that “these constraints tend to have direct and significant influence on managerial and firm performance,” Farmer and Richman (1965: 29–30) then present a “constraint-management process matrix,” interrelating 29 constraints with 76 “critical managerial elements.” Richman and another collaborator, Copen (1972: 43), acknowledge that this matrix “provides a useful check list for both researchers and practitioners, and it permits the statement of a large number of suggestive relationships in a very small space. What it does not indicate, however, is what quantitative relationships” obtain between the constraints and the managerial elements. Notwithstanding the shortcomings of their model from a conceptual standpoint (e.g., the confusion between cultural and social-structural levels of analysis) and from a methodological perspective (the inadequate operationalization of variables to permit the measurement of relationships), this is a promising approach to developing linkages between *organizational* and *institutional* phenomena.

In a highly suggestive essay, Stinchcombe (1965: 143, 151) has formulated several propositions concerning the relationship between various societal characteristics and the rate of formation and the rate of success of new organizations. Thus, for example, he hypothesizes that societies differ in the “rate at which special-purpose organizations take over various social functions (economic production, policing, education, political action, military action, etc.)”; that the rate of industrialization of a society is “an indicator of the organization-forming capacity of the population”; and that literacy is related to the “rate of formation of voluntary associations, political party branches, income tax departments, vocational schools, effective police departments, and so on.” In addition, Stinchcombe (1965: 169) opens up for exploration an intriguing question of the social stratification among organizations, namely, that organizations tend to be differentially ranked according to wealth, power, and prestige. “Organizations as well as individuals have ranks and these ranks are defended with substantial resources.”

From the perspective of our social-structural model, there is yet another type of stratification system of particular significance not only to the social ranking of organizations but also to their internal structure, processes, and effectiveness: the

stratification of the *institutional* spheres of a society. Societies evidently assign different weights to different institutional spheres or—as Tumin (1956: 218) has argued—select *one* of their institutions for special emphasis:

Sometimes religious devotion is stressed; some societies are highly political in ultimate orientation; others emphasize primarily the facts and fictions of kinship; and in still others, the production of goods and services assumes the highest importance. Which institutional complex is emphasized can vary over time within any single society.

Mills (1956: 6), on the other hand, contends that not *one* institution but *three* have a commanding position in the United States:

Within American society, major national power now resides in the economic, the political and the military domains. Other institutions seem off to the side of modern history. . . . Religious, educational and family institutions are not autonomous centers of national power; on the contrary, these decentralized areas are increasingly shaped by the Big Three in which developments of decisive and immediate consequences now occur.

Underlying these propositions about the stratification of institutional spheres is an assumption that each institution controls different amounts of resources and sanctioning power that it uses in regulating the behavior of organizations and individuals associated with it in an effort to maintain its social rank. Thus, it follows that the same type of organization, say, a machine tool company of medium size, in both the United States and Iran is likely to be ranked differently, with the American company probably ranking higher, because economic institutions in this country have more power, wealth, and prestige than they have in a society dominated by authoritarian political institutions such as Iran. In other words, a general proposition may be advanced linking the stratification of institutions with the stratification of organizations:

Hypothesis 17: Societies differing in the social ranking of institutions are also likely to differ in the social ranking of organizations associated with the respective institutions.

One way of ascertaining the social ranking of organizations as well as of institutions is to discover which organizational elites from which institutions participate in the making of which critical societal decisions. Whether progress in research on social indicators will yield direct or indirect measures of what might be called the “institutional integration of organizational elites” remains to be seen. Such research would have to take into account salient dimensions for differentiating institutions and, in turn, societies. In Table 16.2, I have indicated how each of the six institutions we have discussed might be dimensionalized and which social indicators might be used for measuring each of the dimensions. I have also noted the potential utility of such an analysis by formulating six illustrative hypotheses—one for each institutional sphere—each of which links *institutional* variables with *organizational* variables.

Table 16.2 *Hypotheses Relating Selected Dimensions of Institutional Spheres of Society to Organizational Variables*

<i>Institutional Spheres of a Society</i>	<i>Illustrative Dimensions for Differentiating Institutional Spheres</i>	<i>Illustrative Social Indicators</i>	<i>Illustrative Hypotheses</i>
Familial	Extended family vs. nuclear family	Number of generations residing in a household	Societies that have a nuclear family system, in contrast to those with an extended family system, are freer to use their surplus resources and are likely to have a higher rate of formation of business enterprises.
Economic	Centrally planned economy vs. market economy	Proportion of all enterprises in a country that are state-owned	In societies with a market economy, as compared to those having a centrally planned economy, organizational capacities are more widely distributed in the population, hence the rate of formation of organizations will be higher.
Political	Authoritarian vs. democratic	One-party vs. two-party or multiparty system	In societies with a one-party system, in contrast to those having a two-party or a multiparty system, conflict-resolution capacities tend to be concentrated in government bureaucracies; hence interorganizational conflicts are less likely to be resolved by the organizations directly involved and are more likely to involve the intervention of a third-party government official or agency.
Educational	Elite system vs. mass system	Mean number of years of formal education in adult population; proportion of 18–26 age group attending colleges or universities	In societies with an elite educational system, in contrast to those having a mass educational system, social distance is greater between organizational elites and rank-and-file members, hence the rate of organizational innovation—technical and administrative—tends to be lower.
Religious	Secular vs. sacred	Presence of a state religion; presence of religious courts; judicial system influenced by religious law	In societies in which a single religion is dominant, recruitment to organizational leadership tends to be on particularistic criteria—such as a position of prominence in the church—rather than on universalistic criteria. By contrast, in societies in which more than one religion is represented or no single religion has a commanding position, recruitment to organizational leadership tends to be on universalistic criteria.
Legal	Formally rational vs. formally or substantively irrational	Degree of emphasis on procedure in court trials; extent of influence of theology in law making and law finding; mean number of years of formal training required for lawyers and judges	Societies with a formally rational legal system, compared with those whose legal systems are formally or substantively irrational, will tend to have a higher level of formalization of rules in organizations not associated with legal institutions.

Clearly, societies differ in their institutional profiles on such dimensions as are presented in Table 16.2, which thereby define their position on a widely discussed evolutionary scale of traditional, transitional, and modern types of societies (Parsons, 1966, 1971). Thus, one type of traditional society might have an institutional profile that includes an extended family system, an agricultural market economy, an authoritarian political system, elitist educational

institutions, sacred institutions, and a “formally or substantively irrational” legal system (Weber, 1954: 61–64). On the other hand, one variant of a modern society’s institutional profile might consist of a nuclear family system, a market economy, democratic political institutions, mass educational institutions, secular institutions, and a formally rational legal system.

By way of summarizing our analysis of the institutional component of the social-structural model of institutions, Figure 16.1 diagrams the potential impact of the prevailing type of institutional structure in a society on (1) the rate of formation of new organizations and the rate of success of new organizations; (2) the social ranking of organizations; and (3) the organizational structure and processes, and, in turn, their joint effect on organizational effectiveness. In other words, a general institutional hypothesis is as follows:

Hypothesis 18: *As the institutional profile approximates that of a modern society, the rate of formation of new organizations and the rate of success of new organizations tend to increase, a social stratification system of organizations tends to emerge, the structure of organizations tends to become increasingly centralized and formalized, organizational processes tend to involve universalistic recruitment and formal modes of socialization and communication, and these structures and processes in turn affect the level of organizational effectiveness.*

EXAMPLES OF SOCIAL-STRUCTURAL EFFECTS ON ORGANIZATIONS

In the literature of organizational research, there is no dearth of examples to interpret—with the aid of our model—as manifesting social-structural effects on organizations. Two illustrations will suffice.

In his study of the evolution of the strategy and structure of the 100 largest British manufacturing firms in 1950–1970, Channon (1973) observes that as the

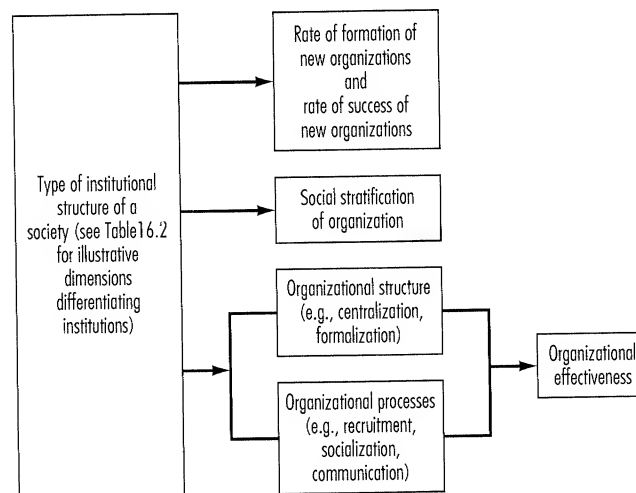


Figure 16.1 Hypothesized impact of type of institutional structure of a society on its organizational systems.

enterprises become increasingly diversified in their products, there is a progressive adoption of the multidivisional structure. In comparing his British firms with the 500 largest American firms, Channon found that 72 percent of the British firms had a multidivisional structure, compared with 86 percent of the American firms. In his effort to explain this finding, Channon (1973: 88, 216–217) refers to the effects of the family and educational institutions in Britain on the British style of management:

An inhibiting factor to the growth of both the strategy of diversification and the adoption of the multidivisional structure appears to have been an initially high percentage of family-controlled companies in the British population. These companies which were slower to diversify and to adopt the multidivisional structure still formed a significant part of the population in 1970. . . . British management tended to come from an upper-class background, to be educated at public schools, and lack higher education, especially training in business techniques other than accounting.

Family-owned enterprises in Britain and elsewhere are constrained to continue in the family tradition, which in this case means pursuing the same product-line rather than adopting the strategy of product diversification; it also encourages maintaining the traditional functional form of organization rather than making the transition to the multidivisional structure.

As regards the educational system, which is still relatively elitist in Britain, “public schools” are held in such high esteem that graduates tend to suspend their formal education rather than continue their education in the professions, in scientific disciplines, or in the humanities. Consequently, British top managers, according to Channon (1973: 217), are technically unqualified to “manage the rapid transition from a non-diversified firm in a non-competitive environment to a diversified company facing intensified competition.”

In a related study comparing two multinational chemical companies, Du Pont and Farbwerke Hoechst (Fw H), Staehle (1970) analyzed the transformation of these firms from a functionally departmentalized, centralized structure to a decentralized, multidivisional structure (Staehle, 1970: 33–44). He found that “in decentralizing the functional areas such as manufacturing, sales, purchasing, R and D, Du Pont . . . went much further than Fw H. . . . Consequently, Fw H retains in these areas a high degree of centralization” (Staehle, 1970: 40). Staehle (1970: 44) concludes his structural comparison of the two firms with the following remark:

Differences in the technical, economic and cultural conditions facing the organizations, as well as differences in the educational background, tradition and philosophy of the top management group, will result in different answers to similar organizational problems.

Two studies of German management provide evidence that throws some light on the different patterns of organizational change in Du Pont as compared with Fw H. Hartmann (1959) observes that the “typical” German firm

has a highly centralized decision-making structure with three tiers of top management—the supervisory board, the executive committee, and the members of upper management (Hartmann, 1959). Ruedi and Lawrence (1970), in their comparison of a German firm in the plastics industry (Plastik AG) with six American firms in the same industry, also note that “the salient organizational factor in Plastik AG was its hierarchical information and decision structure.” Their observation concerning the highly formal mode of communication in their German firm is particularly striking:

The vertical communications network relied heavily on a formal letter-writing and signing procedure. Plastik AG followed the standard German practice of limiting the right to sign letters (the *Prokura*) to senior middle management, although most of the detailed information was supplied by lower echelons. Since the people who sign letters were responsible for the letters’ contents, senior managers spent about one third of their time reading letters prepared by people below them. (Ruedi and Lawrence, 1970: 58)

In an effort to explain some of these findings as well as the general observation that American chemical firms are more effective than German firms, Ruedi and Lawrence (1970: 70) reported differences in values between Germans and Americans, including the fact that Germans have a “stronger desire for explicit and stable relationships, structures and methods” and a lower need for achievement. By way of interpreting some of these differences, Ruedi and Lawrence (1970: 71) state:

These general tendencies are interwoven with the many institutions of German life and manifest themselves as organizational characteristics. The strong authoritarian relationship of the father, for instance, is transferred to a strong subordinate-superior role-set in the university (where a Ph.D. candidate spends an average of seven years as a particular professor’s assistant) and to a similar subordinate-superior role-set in German business. This role-set is quite explicit and manifests itself as a “proper” sense of duty and loyalty to the superior.

Thus an authoritarian family system evidently has a strong impact on organizational role behavior as well as on organizational design. Under the circumstances, it is easier to understand Staehle’s (1970) finding of the greater reluctance on the part of the management of Fw H as compared with that of Du Pont to decentralize more fully its structure, notwithstanding the pressures of a highly diversified product-line.

EXAMPLES OF ORGANIZATIONAL EFFECTS ON SOCIAL STRUCTURE

Organizational researchers have thus far largely neglected the study of the impact of organizations on social structure. This is understandable in view of the

fact that the organizational environment is generally defined in much more circumscribed terms than the approach taken in this chapter. The emphasis in the organizational literature is predominantly on how organizations *adapt* to an uncertain, dynamic, and threatening environment, not on whether and under what conditions they take the initiative to *modify* their environment and thereby further their objectives. Thus the recent increase in research on the functioning of boards of directors is oriented to ascertaining how the size and composition of boards affect the flow of resources and support from the environment and in turn the level of organizational effectiveness (Pfeffer, 1972, 1973). In addition, studies of interlocking directorates—which are clearly important mechanisms for integrating the organizational elites in a society—document that they are extensive and enduring, notwithstanding the fact that they are often in violation of the Clayton Act of 1914 (Dooley, 1969; Levine, 1972; Dye, Declercq, and Pickering, 1973). Such studies fall short of ascertaining the impact that organizations with interlocked directorates have on the social structure. At least one impediment to such research is that organizational effects are difficult to observe. Another is the failure to recognize that organizations capable of modifying their environments engage in what is essentially *political* action. They use their resources and sanctioning power against actual or potential opponents to alter events—role behavior of target individuals, organizational behavior, law, and other institutionalized arrangements. Clearly, organizations capable of engaging in this type of political action are large in size relative to the environing social system, be it a community or a society. Several illustrations of this proposition may be helpful.

The impact of the Du Pont Company and the Du Pont family on Delaware is a case in point. Commanding vast resources and sanctioning power, partly due to the fact that it employs 11 percent of the state's labor force and generates 20 percent of the state's gross product, Du Pont has succeeded in modifying and controlling events in Delaware and beyond (Phelan and Pozen, 1973: 1). To begin with, the company was instrumental in 1897 in the passage of a corporation law that provided for the maximum rights for the corporation and its management. Several legislators "prominent in Du Pont affairs" and one family member were active in the legislative deliberations (Phelan and Pozen, 1973: 163). In the 1967 revisions of the General Corporation Law, Du Pont attorneys appeared before the revision commission, and in 1969 a Du Pont family member, who was in the legislature, introduced the amendments (Phelan and Pozen, 1973: 317). "Instead of publicly opposing bills that might harm the company, Du Pont first tries to obtain an amendment." To prepare amendments to bills the company opposes, the company "maintains a large Legislative Affairs Department whose lawyers scan thousands of proposed federal bills" (Phelan and Pozen, 1973: 318). One bill that received the support of "Du Pont-related legislators" and of the governor himself, who was a former executive of Du Pont, provided for a reduction of capital gains taxes (Phelan and Pozen, 1973: 344).

As impressive as Du Pont's effect is on the social structure of Delaware, its impact—along with that of other multinational enterprises—on the various

host countries in which it has subsidiaries is at least as great, if not greater:

When the large MNE [multinational enterprise] enters a local economy, buys out local entrepreneurs, bids up local wages, gets favorable credit and tax treatment, it may rationalize its own organization structure and market control. But for the indigenous economy, it removes at a stroke the scarce resources which can serve the industrial strategy of that country, even if that strategy is not the same as that of the MNE. Once local entrepreneurs are in the service of the MNE, they are not available to pursue local economic goals, but those of the MNE pursuing its own "global" strategy. Once local risk capital is pooled in the service of the MNE, it is not available to foster economic development locally. (McMillan, 1974)

This view of how the multinational corporation can modify the institutional structure of the host countries in which it operates has led McMillan (1974: 40) to refer to this type of corporation as a "control agent."

A recent U.S. Senate study documents the resources, if not the sanctioning power, of multinationals by ranking 99 nation-states and world-wide corporations according to GNP or gross annual sales. Of the 99 ranked entities, 40 are multinational corporations. In commenting on this rank order, the authors of the Senate report observed that

if General Motors were a nation, its "economy" would be the 23rd largest in the world, with Standard Oil (New Jersey) and Ford not far behind. (U.S. Senate Committee on Finance, 1973: 403)

Because of the magnitude of their resources as well as their sanctioning power, multinationals have been very effective on the whole in *modifying*—as well as *adapting* to—the multitude of societal and cultural contexts in which they are located.

SOME IMPLICATIONS OF THE SOCIAL-STRUCTURAL MODEL FOR FUTURE ORGANIZATIONAL RESEARCH

If the exploratory social-structural model of organizations outlined above—which is admittedly programmatic in nature—were to become the point of departure for research, it would require a new research strategy, both substantively and methodologically. Instead of treating members of organizations and organizations themselves as though they were isolates, the unit of analysis would be interactions among individuals—as reflected in their role-sets, their status-sets, and their interactions among organizations, as evidenced by their organization-sets. And rather than assume that these interactions are stable, it would also be important to ascertain changes over time in role-sets, status-sets, and organization-sets. Moreover, it would be necessary to take account of how specific dimensions of the institutional spheres of a society relate to the interactional components of social structure, namely, role-sets, status-sets, status-sequences, and organization-sets.

With some noteworthy exceptions, the prevailing research strategy in the study of organizations is atomistic and static. This is a function largely of the *organization* of research on organizations and of inadequate resources. Individual researchers or pairs of researchers with modest or minuscule budgets find it more expedient to gather data from isolated, rather than from interacting, individuals and organizations. In addition, as Coleman (1961: 441) has pointed out, "survey research methods have often led to the neglect of social structure and of the relations among individuals." In their pioneering study of role conflict and role ambiguity, Kahn and his colleagues (1964a) traced the role-sets of 53 status-occupants in six industrial organizations. After conducting interviews with each of the 53 individuals, they then interviewed 381 "role senders" or "role partners," an average of about 7 role partners for each of the focal persons or status occupants of the 53 role-sets (Kahn *et al.*, 1964a: 41). The rationale for this kind of survey is clearly different from that of the conventional survey in which the individuals in the sample are treated in isolation from one another.

An example of a hypothetical study informed by our social-structural model might clarify some of the issues involved. Starting with the assumption that a general problem in organization theory, as we have seen, is the need to explain variation in structure, processes, and effectiveness, at least two organizations—preferably a sample—markedly different in, say, performance, might be selected in at least two societies. Likely candidates for such a comparison are a chemical firm in the United States matched on size and product-line with a chemical firm in West Germany, in view of the finding by Ruedi and Lawrence (1970) that American firms are substantially more effective than German firms. After first measuring the structure of the two firms (with the aid of some of the scales developed by the Aston group [Pugh *et al.*, 1968] or some of the indicators employed by Blau and Schoenherr [1971: 28] and their processes (such as recruitment, socialization, and communication), each organization would then be considered as a focal organization for a social-structural analysis. The role-sets of all boundary personnel would be mapped, along with their status-sets and status-sequences. In the process of gathering such data, the organizations forming the input and output organization-sets would be identified and the interactions among them ascertained. The institutional ramifications of the status-sets and organization-sets—economic, legal, political, educational, familial, and the like—would then be the focus of inquiry. To deepen their understanding of the relationship between some of the institutional sectors of the society and the organization-sets, the researchers would probably iterate the process of mapping role-sets, status-sets, status-sequences, and organization-sets by selecting the most salient elements in the input and output organization-sets of the two firms and treating them in turn as focal organizations.

In sum, the research strategy based on a social-structural model of organizations has four distinctive features: First, it is *comparative*, not in the sense of a study of a sample of organizations in a given society using multivariate analysis but in the cross-national or cross-societal meaning of the term (Blau and Schoenherr, 1971, 6–7; Glaser, 1971; Heydebrand, 1973c; Evan, 1975a).

Second, it is *longitudinal* because of the importance for the structure and functioning of the focal organization of measuring status-sequences in role-sets and status-sets and changes in organization-sets. Third, it is *interdisciplinary* because of the macro-level focus that presupposes the need to integrate the knowledge of several disciplines such as sociology, economics, political science, and anthropology. Finally, it is *collaborative* in its *modus operandi*. The academic model of the individual researcher is manifestly inappropriate for the size of the research effort that is required (Hagstrom, 1964). Not even a team of two or three organizational researchers would be capable of coordinating such a study. Instead, teams of researchers in several countries would have to be organized to pursue a common research goal. If they were to succeed in integrating the research efforts of widely dispersed team members, all of whom would probably consider themselves professional peers, they would probably discover the need to design a research organization that is *collegial* rather than *hierarchical* in structure.

SOME CONJECTURES ABOUT THE DESIGN OF ORGANIZATIONS OF THE FUTURE

Even if futurology were a more developed field than it is, it would still be hazardous to forecast the design of future organizations. The diversity of forecasts on this subject articulated by social scientists is proof of the state of the art (Bennis, 1973; Gross, 1973; Thompson, 1973). Although few would question the twin assumptions that organizations will continue to exist and to function as primary instruments for achieving a multitude of collective purposes, the question of whether they will undergo any basic changes in design is still largely a matter of conjecture. In order not to stray too far from present reality in my conjectures, I shall take two organizations as prototypes of the design of future organizations—the multinational enterprise and the international nongovernmental organization (INGO) (see Chapter 18).

That an entity less inclusive than the nation-state can operate with quite manageable legal and political constraints in a variety of national contexts is itself a surprising development. Equally impressive is the rate of increase in foreign direct investment by American, Canadian, West European, and Japanese multinationals, and the rate of return on their investments. Whatever effects, functional or dysfunctional, multinationals are having on host countries, their financial success is partly a function of their innovative organizational designs. By adopting a divisional structure, multinationals have succeeded in simultaneously decentralizing and maintaining a high degree of headquarters control over geographically dispersed operations. Recent technological developments, particularly in computer technology, have made it possible for corporate headquarters staffs to monitor their far-flung subsidiaries. They also systematically scan their external environments for information essential for decision making.

A recent study of the information sources used by executives at the corporate headquarters of U.S. multinationals found that the overwhelming majority

of executives rely on external sources of information. Abroad, however, they rely primarily on sources of information internal to their companies. This finding, according to the author, "explains one of the major strengths of a multinational company—it is a worldwide intelligence gathering and processing system" (Keegan, 1974: 421).

By comparison with the multinational enterprise and its vast resources and sanctioning power, the class of international nonprofit and nongovernmental organizations seems quite feeble. However, they do have at least three significant attributes in common: They are both nongovernmental entities; both operate in numerous countries around the world; and both have greatly expanded in the twentieth century. The population of INGOs includes a wide spectrum of special-purpose organizations—economic, political, religious, educational, scientific, technological, legal, recreational, and so on. As of the 1970s, there were approximately 1,900 INGOs, and about one-half of them were international professional associations concerned with contributing to the development of knowledge and facilitating communication among professionals in different countries (Skjelsbaek, 1972: 75; Evan, 1975b).

Although membership in INGOs is concentrated in industrialized countries, especially those with democratic political institutions and a pluralistic ideology, the rate of participation is increasing in other countries, particularly in the newly established independent states in Africa (Skjelsbaek, 1972: 82–83). Since the growth of INGOs, according to Skjelsbaek (1972: 84), is largely due to economic and technological developments—and assuming such developments are not interrupted in the future—he predicts a remarkable expansion of INGOs: If the annual growth of 5 percent continues, the population of INGOs by the year 2000 could reach 9,049. In addition, he hypothesizes that interaction among INGOs as well as between INGOs and international governmental organizations will increase. If this hypothesis is confirmed, the influence of INGOs in international decision making will very likely increase substantially.

Given these facts about INGOs and multinational corporations, can these two disparate types of organizations serve as prototypes of the future design of organizations in general? Yes, provided the prognosis of several students of international relations on the progressive development of "transnational interactions" and a "world society" proves to be correct (Nye and Keohane, 1972: 75; Burton, 1974). Nye and Keohane (1972: vii) use the term "transnational interactions" to describe "the movement of tangible or intangible items across stable boundaries when at least one actor is not an agent of a government or an intergovernmental organization." Similarly, Burton's (1974: 6–7) concept of a world society characterizes the emergence of a system of interactions transcending the boundaries of nation-states: "The evidence is before us in terms of communications, movements of people, the epidemic spread of ideas and ideologies, transnational corporations, functional institutions that are universal, tourism, migration, sympathies and support across boundaries and other increased transactions associated with the post-1945 era" (Burton *et al.*, 1974: 6–7). In terms of this prognosis, INGOs and multinational enterprises are both "transnational actors" on the world scene. Although Gerstacher (1972b: 275), the president

of Dow Chemical Company, does not use either of the concepts of transnational interactions or world society, he evidently subscribes to the prognosis of Keohane, Nye, and Burton in his assessment of the future of multinational corporations:

We appear to be moving strongly in the direction of what will not be really multinational or international companies as we know them today, but what we might call "anational" companies—companies without any nationality, belonging to all nationalities. We generally conceive of the multinational company as one having a fixed nationality (that of the parent company) but operating in many nations. With the blossoming of a true world economy these multinational bees, whether they are American or British, German or French, Russian or Japanese, will be establishing more hives in the farther fields.

If progress toward a world society and transnational interactions continues in the coming decades, it is a safe conjecture that:

1. A substantial proportion of the millions of organizations throughout the world will tend to become *transnational* in their organizational design and in their scope of operations.
2. As a consequence of what might be conceived as a transnational strategy, organization-sets will tend to become larger in size and more complex in their interactional networks.
3. Rapidly advancing production, transportation, and communication technologies will become increasingly significant determinants of organizational design.
4. With the aid of computer technology, the interaction networks in organization-sets will become more visible to organizational members and nonmembers alike.
5. Organizational members will tend to adopt an increasingly cosmopolitan role orientation that will pose severe problems for the management of organizations.
6. In searching for solutions to recurrent problems of organizational effectiveness, organizations will increasingly experiment with a variety of nonhierarchical designs, including, for example, collegial systems of authority. (Evan, 1971)

CONCLUSION

If any of these conjectures about the design of organizations of the future are confirmed by events, it hardly follows that organizations will become standardized in their structure and functions. Some organizational researchers who are searching for organizational imperatives would welcome a trend toward uni-

formity in organizational design. Such a development, if it were to come to pass, would obviously facilitate the discovery of relationships between such variables as size, formalization, specialization, centralization, technological complexity, and so on that are so robust as to be free of the effects of culture and social structure (Hickson *et al.*, 1974). This admirable goal is likely to be attained only if two events transpire: (1) the decline of the nation-state; and (2) the convergence of the world's economic and political systems. Barring such a global transformation by the year 2000—the current target date for many conjectures—organizational researchers will no doubt continue to wrestle with problems of measuring the impact of social structure on organizations for many years to come. And organizational practitioners will continue to be bedeviled by a multitude of management problems that have their roots in the social structure of society and that impede progress toward achieving organizational goals.

Societal Culture, Organizational Culture, and Societal Development

Is the concept of “organizational culture” or “corporate culture” a new fad or an enduring heuristic approach to organizational research? While there was a mushrooming of literature on organizational culture during the 1980s, the research continues to suffer from the absence of any explicit analytical effort to relate organizational culture to societal culture (Jelinek, Smircich, and Hirsch, 1983; Schein, 1985). This chapter pinpoints various linkages between societal and organizational cultures, and describes the impacts of culture, both micro and macro, on societal development. Socioeconomic development in developing countries cannot gain momentum until planners and administrators understand the cultural dimension of people’s lives, especially in an organizational context (see Chapters 15 and 16).

We hypothesize that the degree of congruence between societal and organizational culture may be a significant determinant of organizational structure, processes, and performance, and that the greater the congruence, the greater the organizational effectiveness. We further hypothesize that a high degree of congruence between societal culture and organizational culture, along with a high level of organizational effectiveness, will promote societal development.

A model linking societal culture, organizational culture, organizational effectiveness, and societal development is presented. Such a model has special

relevance for developing societies engaged in diverse development projects that are funded, for example, by the World Bank (1990). It is also relevant for developed societies in which there is often a lack of congruence between democratic political institutions embedded in the societal cultural and the organizational structure of corporate cultures.

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A CRITIQUE OF THE CONCEPT OF ORGANIZATIONAL CULTURE

During the last decade, a spate of articles and books has appeared—some popular and some professional—claiming that organizational culture represents a path-breaking ‘metaphor’ or ‘paradigm’ (Ouchi, 1981; Pascale and Athos, 1981; Deal and Kennedy, 1982; Pettigrew, 1979, 1985; Schein, 1985; Frost *et al.*, 1985). The diversity of conceptions of organizational culture is impressive and bewildering. In a special issue of *Administrative Science Quarterly*, edited by Jelinek, Smircich, and Hirsch (1983), devoted to this subject, nine authors presented nine different perspectives on organizational culture. Thus, Smircich (1983) has sought to interrelate culture theory with organization theory; Gregory (1983) has advocated a “native” or organizational member view; Barley (1983) has addressed the issue of signs and semantic codes; Riley (1983) has focused on the symbols used in the service of organizational power; Martin, Feldman, Hatch, and Sitkin (1983) asserted that organizational stories are a unique reflection of an organization’s culture; Smith and Simmons (1983) have also presented a “native” view involving the use of a fairy tale; Jones (1983) has advocated a transaction-cost perspective on culture as it relates to property rights; Wilkins and Ouchi (1983) have proposed a transaction-cost view with special reference to efficiency; and Broms and Gahmberg (1983) claimed that “autocommunication” reflects the values and myths of an organization’s culture.

Underlying this profusion of ideas on organizational culture is a concern with the subjective and interpretive aspects of organizational experience. Also noteworthy is that all authors treat organizational culture as though it were a “closed system.” This is surprising on two scores. First, given the pervasiveness of the open systems perspective in organizational research, why confine one’s view of organizational culture to intraorganizational dynamics? Second, one would expect that the expanding literature on organizations and environments would direct attention to the wider context in which organizational culture is embedded. As Jelinek, Smircich, and Hirsch (1983: 338), in their introduction to the special issue of *Administration Science Quarterly*, observe, “there is

a tendency in all of the papers presented here to stress the internal, rather than to look to the external, societal, cultural context within which organizations are embedded."

In a conference proceedings volume edited by Frost *et al.* (1985), there is a similar proliferation of ideas on organizational culture. The conference participants also addressed the question whether culture is a paradigm, a metaphor, or a theory, proffering a variety of answers as to the genesis, maintenance, and transmission of organizational culture. Weick (1985: 383) avers that "strategy and culture may be substitutable for one another." Lundberg (1985: 169–170), on the other hand, notes that "for all its contemporary popularity . . . organizational culture remains a phenomenon that is as yet neither fully understood nor agreed upon." Nevertheless, most of the conference participants seemed to share the optimism expressed by Louis (1985: 29): "We are at last in the possession of an integrative lens, one that is essentially phenomenological." Given the pragmatic and applied orientation of organizational research, the participants examined the question of whether organizational culture could be managed and changed. Toward the end of the volume, they address the question: "How are organizational culture and the wider cultural context linked?" In his introduction to this part of the book, Moore (1985: 280) asserts that "all of the authors in Part IV would probably agree that it is desirable for the culture of an organization to be in congruence or harmony with at least some dimensions of the broader culture in which it is embedded." This assertion points to our basic critique of the current literature on organizational culture: apart from the confusion surrounding the very concept of organizational culture, the literature overlooks an analysis of the relationship between organizational culture and societal culture or else it assumes that there is a high level of congruence between the two, without pondering the question of how one might obtain a measure of congruence for empirical research.

ORGANIZATIONAL CULTURE FROM AN ANTHROPOLOGICAL PERSPECTIVE

The concept of "culture" in organization theory has been borrowed from anthropology, where numerous definitions have been developed. For instance, Kroeber and Kluckhohn (1952) cite no less than 164 definitions of culture, classified in such categories as descriptive, historic, normative, psychological, structural, and genetic (See Chapter 15). An argument has been made for the salience of the *normative* dimension of culture "for facilitating research on the relationship between cultural and organizational systems" (see Chapter 15). This dimension deals with values and norms—conceptions of what is desirable and prescriptions and proscriptions of conduct—that affect organizational behavior.

Kluckhohn and Strodtbeck (1961: 11) have formulated a theory of value orientations according to which all cultures are confronted with the following

five “common human” problems:

1. What is the character of innate human nature (human nature orientation)?
2. What is the relation of man to nature (and supernature) (man-nature orientation)?
3. What is the temporal focus of human life (time orientation)?
4. What is the modality of human activity (activity orientation)?
5. What is the modality of man’s relationship to other men (relational orientation)?

The solutions to these five problems are limited, according to Kluckhohn and Strodtbeck (1961); what is more, the variation in value orientations results in dominant and variant orientations. Their fivefold classification of value orientations with their postulated range of variations is presented in Table 15.1 (page 248).

Anthropologists have not developed a comparable classification—either substantive or analytical—for the norms of a culture. There is, nevertheless, general consensus among anthropologists and sociologists that there is a cluster of prescriptive and prospective norms associated with each *institutionalized* role in society. Thus, there are commonly expected norms, some reinforced by law, governing the role behavior of father, mother, spouse, teacher, corporate executive, judge, legislator, policeman, and the like. As in the case of value orientations, it is reasonable to anticipate that there are *dominant* and *variant* norms associated with different institutionalized roles in a society.

What are some of the implications of an anthropological perspective for the conceptualization of organizational culture? First, the culture of an organization can be a microcosm of the encompassing culture. In other words, it can mirror the dominant values and norms of the societal culture. Second, it can deviate in one or another respect from the dominant values and norms of the societal culture, so that it represents a variant of the dominant values and norms. Third, in large organizations, such as multidivisional corporations, universities consisting of many colleges, and general hospitals with many medical and surgical departments, we may observe a multiplicity of organizational cultures—some of which may be congruent with the societal culture and some incongruent—or an overarching organizational culture with a number of organizational subcultures.

With the foregoing perspective in mind, how do some definitions of organizational culture compare? Two definitions in this context will suffice.

Pettigrew (1979: 574) states that “culture is the system of . . . publicly and collectively accepted meanings operating for a given group at a given time.” Culture can also be regarded as “the source of a family of concepts . . . [such as] symbol, language, ideology, belief, ritual, and myth” (Pettigrew, 1979: 574). These “concepts are to varying degrees interdependent and . . . there is some convergence in the way they relate to functional problems of integration, control, and commitment” (Pettigrew, 1979: 576). In analyzing the shared meanings in

an organization, values and norms unavoidably surface. In his outstanding study of Imperial Chemical Industries (ICI), Pettigrew (1985) has examined the corporate headquarters and four divisions from a political and cultural perspective. In the process, Pettigrew has identified five distinct cultures within ICI.

Schein (1985: 9), in his *Organizational Culture and Leadership*, has systematically developed the following definition of organizational culture:

[Culture is] a pattern of basic assumptions—invented, discovered, or developed by a given group as it learns to cope with its problems of external adaptation and internal integration—that has worked well enough to be considered valid and therefore to be taught to new members as the correct way to perceive, think, and feel in relation to those problems.

If one explores the basic assumptions in a given organization—by which Schein (1985) means the five value orientations of Kluckhohn and Strodtbeck (1961)—the dominant values and norms come into focus. As the title of his book indicates, Schein is particularly concerned with discovering the role of leadership in the formation and transformation of organizational culture.

Common to the treatment of organizational culture in the work of Pettigrew and Schein—and almost all organizational researchers—is the absence of any explicit analytical effort to relate organizational culture to societal culture.

SOCIETAL CULTURE AND ORGANIZATIONAL CULTURE

Given our normative approach to culture, it follows that it is important to ascertain the nature of the relationship between the dominant societal values and norms, on the one hand, and the dominant values and norms of specific organizational cultures, on the other.¹ Is the relationship congruent or incongruent? Or better still, to what extent is the relationship between societal culture (SC) and organizational culture (OC) congruent?

To measure the degree of congruence between SC and OC, an entirely different research strategy is required than has hitherto been pursued in cross-cultural studies of organizations. Survey research involving two levels of analysis would be necessary: (1) a sample of the population of a society to measure the degree of commitment to a set of societal values and norms; and (2) a sample of members of two or more organizations to measure the degree of commitment to the societal set of values and norms and any others allegedly comprising their organizational cultures (see Chapter 15). The resulting measures of congruence would be related to organizational variables of interest to the researcher, such as structure, process, and organizational effectiveness. It should be obvious that this methodology is quite different conceptually from the Kilmann-Saxton "Culture Gap Survey," which has an entirely intraorganizational focus (Kilmann, 1985: 66–68).

¹ For an intriguing analysis of the concept of organizational culture with respect to levels of analysis other than societal culture, see Pennings and Gresov (1986).

The closest approximation to our SC-OC survey methodology is Hofstede's (1980) model measuring the effects of societal culture. He has developed a model of national cultural patterns by studying a matched sample of respondents of a multinational corporation in 40 countries. By defining culture as "the collective programming of the mind which distinguishes the members of one category of people from those of others" (Hofstede, 1984: 389), Hofstede (1985: 347-348) has introduced four dimensions of culture:

1. *Power Distance*, that is, the extent to which the members of a society accept that power in institutions and organizations is distributed unequally.
2. *Uncertainty Avoidance*, that is, the degree to which the members of a society feel uncomfortable with uncertainty and ambiguity, which leads them to support beliefs promising certainty and to maintain institutions protecting conformity.
3. *Individualism*, which stands for a preference for a loosely knit social framework in society in which individuals are supposed to take care of themselves and their immediate families only; as opposed to *Collectivism*, which stands for a preference for a tightly knit social framework in which individuals can expect their relatives, clan, or other ingroup to look after them, in exchange for unquestioning loyalty.
4. *Masculinity*, which stands for a preference for achievement, heroism, assertiveness, and material success; as opposed to *Femininity*, which stands for a preference for relationships, modesty, caring for the weak, and the quality of life.

These dimensions affect organizations as well as their members; for instance, the dimensions of power distance and uncertainty avoidance affect organizational structure and processes, while the dimensions of individualism and masculinity affect both individual and group behavior in organizations.

Management concepts and practices successful in one culture may not be useful in others. Thus, incentive schemes based on motivational concepts developed in an individualistic-masculine culture, like the United States or Canada, cannot be applied either in a collectivistic culture like Japan, or in a feminine culture like Scandinavian countries. For example, of the six American automobile workers who visited the Saab-Scania plant in Sweden in 1974, where a new system of group assembly had been installed, five rejected the system, probably because American workers prefer to work on their own and set their own challenge, while Swedish workers enjoy collaborating with others (Hofstede, 1985: 355).²

Yet another study that explicitly addresses the issue of the impact of societal culture on organizational culture is that of Trompenaars and Inzerilli (1985). In a nine-country study of employees of 10 companies, employees' perceptions of organizational structure were related to the value orientations of their societies.

² For a creative application of Hofstede's four cultural dimensions, see Kogut and Singh (1986), who developed a cultural-distance index measuring the difference between any two countries.

The authors have concluded their report on the hopeful note that their research would “stimulate further studies on the relationships between organizational and societal cultures. So far this relationship is relatively unexplored in spite of the recent flurry of studies of organizational cultures” (Trompenaars and Inzerilli, 1985: 22).

A MODEL OF SOCIETAL CULTURE, ORGANIZATIONAL CULTURE, AND SOCIETAL DEVELOPMENT

In an effort to spell out some interdisciplinary linkages among organization theory, anthropology, sociology, and socioeconomic development, we present in Figure 17.1 a model postulating a set of hypothetical relationships among societal culture, organizational variables (organizational culture, structure, processes, and effectiveness), and societal development. Four questions prompted the development of this model:

1. To what extent is there congruence between SC and OC in a given society?
2. How does the degree of congruence between SC and OC affect the organizational structure and organizational processes in a given population of organizations?

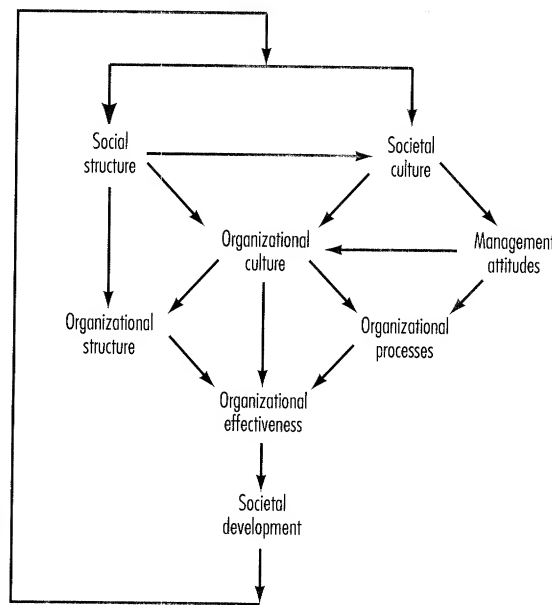


Figure 17.1 A model of societal culture, organizational culture, and societal development.

3. How does the degree of congruence between SC and OC affect organizational performance?
4. From an aggregate analysis standpoint, what are the consequences of the degree of congruence between SC and OC for societal development?

Because of the dearth of relevant comparative empirical studies, the discussion following will be principally analytical in focus and will draw on some illustrative research findings.

Social Structure and Societal Culture

Social structure and societal culture are two macro-societal components of an organization's environment. The distinction between these two concepts was clarified in a joint publication by two leading theorists of anthropology and sociology. Kroeber and Parsons (1958) defined culture as the "transmitted and created content and patterns of values, ideas, and other symbolic meaningful systems as factors in the shaping of human behaviour and in the artifacts produced through behaviour," and social structure or social system as "the specifically relational system of interaction among individuals and collectivities."

The socio-structural component of an organization's environment includes a complex of social institutions (Stinchcombe, 1965: 142; also see Chapter 16, this volume) such as economic, political, familial, religious, educational, and legal. In relational or interactional terms, social structure involves the interplay of a population's role-sets, status-sets, and status-sequences (Merton, 1957a: 162). As these patterned interactions are sustained over time, the culture of a society emerges, develops, and changes. Hence, we postulate a causal relationship between social structure and societal culture.

Social Structure and Organizational Culture

Any one or a combination of the six major institutional spheres of a society (economic, political, educational, religious, familial, and legal) can become the axis around which an organization's culture develops (see Chapter 16). Thus, in a communist society, the political institutions become embedded in the values and norms of an organization's culture; in a capitalist society, the values stemming from economic institutions predominate; in a theological society such as Saudi Arabia, Islamic principles undergird organizational culture; and in Western societies in which a substantial number of family-owned enterprises exist, the values of kinship may be reflected in functionally diffuse types of relational orientations.

Social Structure and Organizational Structure

We hypothesize that the social structure of a society can and does influence the design decisions of organizations as regards organizational structure. A case in point in Channon's (1973) study of the multidivisionalization of British and

American firms. He has suggested that the tardiness of British firms in making the transition from a traditional, functional form of organization to a more diversified, multidivisional form was attributable to the educational system in Great Britain, where the top management tended to be educated at public schools, and lacked higher education and training in professional fields such as business administration.

Societal Culture and Management Attitudes

Studies of cross-cultural management have generally reported that societal culture influences workers' and/or management attitudes. For example, Gallie (1978) has reported that differences between the attitudes of employees working for the same oil company in Great Britain and France arose from the cultural differences between the two countries. Kelly and Reeser (1973) have observed differences between the attitudes of American managers of Japanese ancestry and those of Caucasian ancestry regarding their respect for formal authority, commitment to long-term employment, interest in team work and paternalism with respect to subordinates. In a similar study, Pizam and Reichel (1977: 70) compared Israeli managers of Oriental ancestry with those of Western ancestry, and reported that the former group (1) were less inclined toward centralized decision making; (2) practiced more peer evaluation; (3) expressed a greater belief in long-term employment; (4) were more paternalistic; (5) had less respect for formal authority; and (6) showed a lower tendency to be team workers. It would, therefore, be safe to conclude that managers' attitudes were determined, to a considerable extent, by their societal cultural orientations.

Management Attitudes and Organizational Culture

Management attitudes also influence the internal culture of an organization. Early managers, whether owners or founders of the organization, have an even more lasting impact. This is because the founders are the only ones that can adapt the organization to themselves; all subsequent managers, to some extent, have to adapt themselves to the organization (Hofstede, 1985). The culture of an organization always reflects, in part, the complex interaction between (1) the values, beliefs, and ideals that founders or early managers bring to the organization initially; and (2) what the organization learns subsequently from its own experience (Schein, 1983).

Management Attitudes and Organizational Processes

In addition to influencing the formation of an organization's culture, management also affects its organizational processes and structure. Negandhi (1973) has argued that differences in organizational structure, processes, and effectiveness among industrial firms are due to their overall management attitude and some

of the external environmental conditions—when size, technology, resources, and the location of the firm are held constant. For the most part, however, the firm's management attitudes toward stakeholders (see Chapter 19) explain differences in various organizational processes (i.e., planning, organizing, motivating, staffing, and controlling) investigated (Negandhi, 1973: 309).

Impact of Organizational Culture on Organizational Structure and Processes

Much of the literature on cross-cultural studies of organization antedates the work on organizational culture. In this body of literature, culture (i.e., societal culture) has often been used as an independent variable, and its effects on the organization's structure, processes, or effectiveness have been discussed. Although the findings are by no means consistent, it is reasonable to infer that culture affects organizational form, management practices, and organizational performance in different social environments (Lammers and Hickson, 1979). None of the cross-cultural studies, however, has attempted to ascertain whether the differences are a function of societal culture or of organizational culture. Thus, for example, a comparative inquiry on organizations in Great Britain, Japan, and Sweden disclosed little evidence of any cultural impact on the Aston study variables of formalization, functional specialization, and centralization (Horvath *et al.*, 1976). These authors, however, did not explicitly measure the effects of societal culture of these countries, nor did they measure the effects of the organizational culture of their firms on the three organizational processes.

In view of the absence of relevant research findings on the relationship between organizational culture, on the one hand, and organizational structure and organizational processes, on the other, the following set of hypotheses, derived with the aid of the Kluckhohn and Strodtbeck (1961) theory, is worth recalling:

A value-orientation profile of:

Future preferred over Present preferred over Past,
Individualism preferred over Collaterality preferred over Lineality, and
Mastery-over-nature preferred over Harmony-with-nature preferred over
Subjugation-to-nature,

would be conducive to an organizational recruitment policy based on universalistic rather than particularistic criteria, a formal rather than an informal socialization process, a high frequency of multidirectional instead of unidirectional communication, and finally, high levels of organizational systems outputs (see page 251).

Yet another hypothesis derived from the rationale for our model presented in Figure 17.1 is as follows:

The degree of congruence between societal culture and organizational culture has a discernible effect on the organizational structures and organizational processes in a given population of organizations.

*Impact of Organizational Culture,
Organizational Structure,
and Organizational Process
on Organizational Effectiveness*

Organizational effectiveness or organizational performance is the ultimate goal—whether manifest or latent—of all organizations. Nevertheless, few organizational studies have focused on it as a principal dependent variable. The complexity of the construct itself, and the diverse ways of defining and measuring effectiveness, partially explain the dearth of empirical research. For present purposes, organizational effectiveness has been conceptualized as “the capacity of an organization to cope with all four systemic processes [inputs, outputs, transformations, and feedback effects] relative to its goal-seeking behavior—however explicit or implicit this may be” (see page 377).

The influence of structure and processes on an organization’s effectiveness, and the role of external environment in this relationship, have been discussed by contingency theorists. They posit that there is a fit between the organization and its environment so that no organizational form can be conceived as optimal, independent of an organization’s environment (Lawrence and Lorsch, 1967). The effectiveness of an organization is a function of the organization-environment fit as well as the congruence between its structure and processes (Galbraith and Nathanson, 1978).

Inquiry into the relationship between an organization’s internal culture and its effectiveness is of recent origin. The prevalent view among researchers and practitioners is that organizational culture influences an organization’s long-term effectiveness. Popular books now advocate the view that organizations with “strong” cultures—strong sets of values and assumptions that define the ways they conduct business—are very effective (Ouchi, 1981; Pascale and Athos, 1981; Deal and Kennedy, 1982; Peters and Waterman, 1982). The implicit conclusion seems to be that an organization’s culture can be managed in the service of improving performance.

Whether an organization’s culture can be a source of sustained high performance is an empirical question that remains to be answered. Barney (1986) has argued that organizations that have valuable, rare, and imperfectly imitable cultures would maintain superior performance, while those organizations that do not have these cultures would not. An organization’s internal culture reflects the unique personalities of its founders and leaders, as well as the characteristics of its larger social environment. Although culture is not permanently fixed, it would not be easily changeable, either. The relationship between internal culture and effectiveness then becomes acute for organizations that face turbulent environments or for multinational corporations that operate in different national contexts with distinct sociocultural and sociostructural differences. For these organizations, effectiveness would be more a function of an organization’s ability to adapt to its social environment than to insist on the same set of symbolic devices in every situation.

A general proposition, in light of the underlying rationale for our model, is that organizational effectiveness depends more on the degree of congruence between societal culture and organizational culture than on either variable alone. In cross-cultural organizational research, therefore, the concept of a “flexible” organizational culture may be more useful than the concept of a “strong” organizational culture.

Impact of Determinants of Organizational Effectiveness on Societal Development

Rogers (1983) states that a major shift has occurred in the conceptualization of development. In the past, there were four main elements in the dominant paradigm of development: (1) economic growth through industrialization; (2) capital-intensive technology; (3) centralized planning; and (4) “internal” causes of underdevelopment. Today, however, development is usually conceptualized as a “widely participatory process of social change in a society intended to bring about both social and material advancement (including greater equality, freedom, and other valued qualities) for the majority of people through their gaining greater control over their environment” (Rogers, 1983: 121). This new definition emphasizes the role of social structure and societal culture in development; hence, it provides a clue as to how organizations—as a basic social unit—can influence societal development.

Several examples of the constraining effects of sociostructural factors on development are in order. If the political and legal institutions in a country do not promote socioeconomic equality, the wealth and services generated by effective organizations will not trickle down to the nonelite groups in society. Similarly, without the growth of internal markets, manufacturing and service firms cannot grow and become more effective; thus, their potential contribution to the development of society cannot materialize. The lack of political, legal, and economic stability in many developing countries is a major obstacle to their development. The greater the degree of instability in environmental conditions, the greater the difficulties organizations have in adapting to their environment. This condition, in turn, lowers their chances of achieving a high level of effectiveness.

Sociocultural factors can also facilitate or hinder the role of organizations in development. For example, whether families encourage or discourage their children to strive for more educational achievement affects the pool of skilled workers on which organizations depend and without which they cannot contribute to the growth and modernization of their society (Hage, 1980). The availability of educated workers is a determinant of organizational effectiveness, especially when organizations adopt more complex technology. Similarly, whether the quality of life is associated with the degree to which material needs are satisfied or with the degree to which people reduce their material needs (Hofstede, 1984) affects the attitudes of workers in a given society, thus affecting

the level of output and performance of organizations. Past performance, on the other hand, affects future goals and strategies, which, in turn, influence the industry and market structure (Porter, 1981).

The influence of cultural and structural factors on economic development has been discussed by Whyte (1969: 717–763) in a comparison of the United States, Japan, and Peru. According to Whyte, the United States and Japan share the societal values of high achievement orientation and high prestige accorded to businesses and business executives. These values stimulate entrepreneurial activities, which, in turn, contribute to economic growth by making the business enterprises more effective. On the other hand, when the dominant societal value regarding human activity is oriented toward “being” rather than “doing” or achieving (Table 15.1), economic development is slower. Examples can be found among countries in the Middle East or South America, where, despite an abundance of natural resources, economic development has not been as impressive as in the countries in the Far East. When the variables of achievement orientation and prestige of business careers are low in a society, industrial and economic development becomes dependent on foreign firms managed by executives unfamiliar with the cultural orientations of a society, which, in the long term, may have negative economic as well as political effects (Whyte, 1969).

Aggregating the impact of effective organizations in a society, we hypothesize that they will significantly promote societal development provided there is a high degree of congruence between societal culture and the organizational culture of the population of organizations.

CONCLUSION

Our model interrelating social structure, societal culture, organizational variables, and societal development—given the meager body of empirically reliable knowledge—constitutes in effect an agenda for future research. Cross-cultural organizational research in both developed and developing societies is required—provided it does not begin and end with a Western ethnocentric bias. Kiggundu, Jorgensen, and Hafsi (1983), in their review of organization management articles in developing countries, concluded that most of these articles lacked local perspective because they were written for Western audiences. To make matters worse, the great majority of studies on developing countries are themselves unicultural (Adler, 1983). Comparative studies in developed and developing countries are needed to ascertain differences in the impact of social structure and societal culture on individual organizations. Systematic comparisons are also needed between the cultural values of a sample of the population of a society and a sample of the members of different organizations in that society in order to discover the relative impact of societal culture and organiza-

tional culture on an organization's structure, processes, and performance (see Chapter 15).

Such research will of necessity require multidisciplinary and multiculturally collaborative teams. Apart from the substantial resources that would be entailed, the proposed research agenda would challenge the theoretical, methodological, and managerial ingenuity of organizational researchers. Unless we meet the challenge, however, the field of organization theory will not make the contributions it is capable of making to promote the welfare of developing as well as developed societies.

Multinational Corporations and International Professional Associations

Bridging the analysis of culture and social structure is the focus of Chapter 18, which compares two types of transnational organizations: the multinational enterprise and the international professional association. These organizations cross the boundaries not only of nation-states but also of several disciplines: sociology, international business, and international relations. Notwithstanding their rapid rate of growth in the past few decades and their role as mechanisms of change in the international system, these organizations have not received the attention they deserve by social scientists studying organizations and international relations (Keohane and Nye, 1972; Evan, 1981; Gilpin, 1987).

A secondary analysis of the data on these two types of organizations yields, among other things, the following findings: there is a positive rank-order correlation between the number of multinational firms with parent companies in a given country and its level of economic development, as measured by the GNP per capita; there is likewise a positive rank-order correlation between the nationality of the principal officials of international professional associations and the level of economic development of the nations in question, and, in turn, a positive rank-order correlation between the number of multinational firms in a country and the number of principal officials of international professional associations from that country.

To throw light on the interactions of these organizations with other components of the international system—nation-states, intergovernmental organizations, and regional organizations—a nonlinear model is developed. With the

aid of this model, various system linkages are identified, and the impact of these organizations on the international system is interpreted in terms of four dimensions of integration: normative, economic, organizational, and occupational. (Burton, *et al.*, 1974)

A comparative analysis of the structural and motivational problems of these organizations yields five hypotheses concerning their effect on the level of integration of the international system. The chapter concludes with a discussion of Durkheim's (1933) thesis about the solidary functions of occupations, which is generalized to multinational corporations and international professional associations.

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Organization theory has for some years been preoccupied with problems of intraorganizational dynamics, principally in the context of industrial organizations. Since the 1970s a shift has occurred in the angle of vision, with some researchers focusing on problems of interorganizational dynamics.¹ Another development is a concern with cross-national comparative research in order to discover the effects of the sociocultural environment on organizational behavior (Boddewyn and Nath, 1970; Evan, 1975a).

Under the circumstances, it is not surprising that scant research attention has been paid to organizations operating in what political scientists and others call the international system (Galtung, 1967; Miles, 1968; Brams, 1969). I refer to two categories of international or multinational organizations: one, a private profit organization that in recent years has come to be designated as the "multinational corporation," and the other, an international professional association, a nonprofit, voluntary association often characterized as an international non-governmental organization, or INGO (Skjelsbaek, 1972: 70-92). Since World War II, both types of organizations have undergone rapid growth (Skjelsbaek, 1972; Wells, 1972). Both organizations also involve the participation of occupational elites—business executives and members of various professions—whose collective efforts could have far-reaching consequences, particularly for the state of the international system.

These two types of organizations pose intricate and challenging problems for organization theory. They raise questions not only of interorganizational dynamics but also of the interaction between organizations and their societal and intersocietal environment. In effect, such questions compel researchers to shift their focus to a level of analysis more macroscopic than the boundaries of a formal organization (see Chapters 15 and 16).

¹ See, for example, Chapters 9 and 10; Emery and Trist (1965); Evan (1966a); Thompson (1967); Aiken and Hage (1968); Litwak and Rothman (1970); Turk (1970); and Hirsch (1972).

The purpose of this chapter is to explore some features of multinational corporations and international professional associations as they bear on the degree of integration of the international system.

ALTERNATIVE MODELS OF THE INTEGRATION OF THE INTERNATIONAL SYSTEM

It is indeed interesting that the term "international organization," as used by most political scientists and other scholars of international relations, refers to the interaction of nation-states (Haas, 1965; Luard, 1966). Haas (1965: 505), acknowledging the ambiguity of the term, states that "a loose definition of international organization . . . would say that it consists of intergovernmental institutions, members of which perceive each other to be basic units of the world polity." The widespread assumption underlying this usage is that the international system is composed of various relationships among sovereign actors. To improve the prospects for peace between nations, it is necessary to generate normative integration, that is, a commitment to a common set of values and norms, through the mechanism of a universal intergovernmental organization. With the aid of multilateral agreements, a complex of intergovernmental organizations is created that builds commitment among nation-states to a body of international law designed to increase the forces for international order. With an increase in the level of normative integration, the international system evolves in the direction of a world community of peaceful sovereign states. In effect, the model implicit in this conception of the international system, diagrammed in Figure 18.1, involves a direct linear process of normative integration increasing as a function of interaction of nation-states within the framework of intergovernmental organizations.

This model guided the formation of the League of Nations and, to some extent, that of the United Nations as well. The failure of the League of Nations to evoke compliance from its sovereign members undermined its authority as well as its capability of generating normative integration. Without abridging national sovereignty, membership in an intergovernmental organization is neither a necessary nor a sufficient condition for the development of normative integration. Nor is normative integration a sufficient condition for significantly transforming

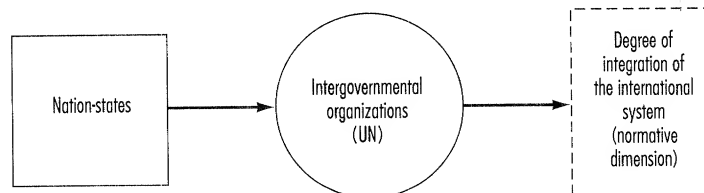


Figure 18.1 Direct linear model of the integration of the international system.

the international system. Other modes of integration—notably economic, organizational, and occupational—which create new patterns of interdependence, are essential if the international system is to undergo a major transformation (Galtung, 1968).

The failure of the League of Nations was not lost on some of its former members in Western Europe. After World War II, they began to explore problems of economic integration by means of regional organizations that would impose limitations on national sovereignty. The Economic and Steel Community, founded in 1952, was conceived as a supranational organization that paved the way for the more inclusive European Economic Community in 1958 (Haas, 1958; Schokking and Anderson, 1960). Among the Communist countries of Eastern Europe and the Soviet Union, a similar movement toward economic integration was initiated, which gave rise in 1949 to the Council on Mutual Economic Aid (CEMA or COMECON) (Grzybowski, 1964). Similar regional organizations have since emerged in Latin America (the Latin American Free Trade Area and the Central American Common Market), Africa, and elsewhere (Nye, 1970).

The United Nations Charter recognizes organizations and seeks to bring them into closer relations with the United Nations (Articles 32–54). And yet this has thus far not led to any structural changes in the United Nations to foster the growth of regional organizations, to encourage interactions among regional organizations, and to incorporate them within its structure, as has been proposed (Evan, 1962d). In addition, of the 175 nation-states that are members of the United Nations, only a small proportion are actively involved in regional organizations. Thus, although the model underlying regionalism, as diagrammed in Figure 18.2, shows much promise of generating economic and normative integration in the international system, it is probably premature to assess its effectiveness in this regard. However, it is doubtful whether in the absence of an infrastructure of multinational nongovernmental organizations of a profit and

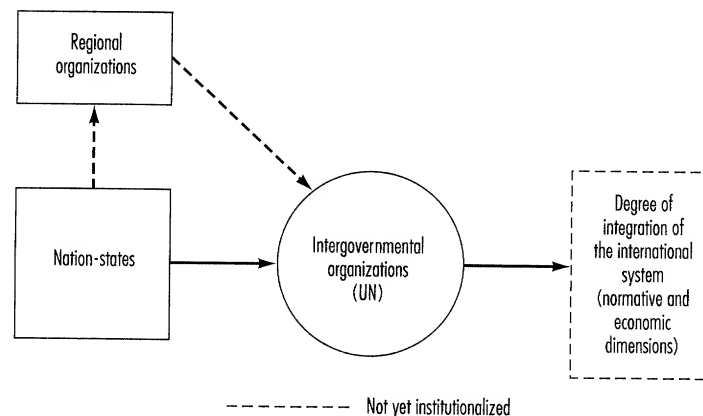


Figure 18.2 Indirect linear model of the integration of the international system.

nonprofit variety, adequate system linkages can be forged among nation-states, regional organizations, and intergovernmental organizations. This conjecture about the potential role of multinational nongovernmental organizations suggests a complex nonlinear model of integration of the international system, to which I now turn.

With few exceptions, social scientists engaged in the sociology of organizations, the sociology of occupations, and the study of international relations have ignored the international nongovernmental organization in general and the international professional association in particular.² By contrast, researchers in international business and economics have begun to speculate about and inquire into the multinational corporation.³ Under the circumstances, it should come as no surprise that the functions of these organizations in the international system have not yet been systematically studied, much less clarified. Our basic assumption is that because these types of organizations are simultaneously subnational, cross-national, and multinational in character, they already provide or may provide in the future many significant linkages between nation-states, regional organizations, and intergovernmental organizations, thus contributing to the process of the *normative, economic, organizational, and occupational* integration of the international system.

Instead of conceptualizing the international system with the aid of a direct or an indirect linear model of integration, as shown in Figures 18.1 and 18.2, a complex nonlinear model with a variety of feedback loops is presented in Figure 18.3. Nation-states, particularly those that are highly industrialized, give rise to multinational corporations, that is, enterprises that develop production, research, and distribution facilities in various countries of the world. Nation-states also spawn a multitude of nongovernmental organizations—a high proportion of which consists of professional associations—that become federated at the international level. Some of these nonprofit nongovernmental organizations are accorded official consultative status under the United Nations Charter (Article 71).

Each type of organization has mutual interactions with regional organizations. And although there are as yet few linkages between the multinational corporation and the international professional association, they are likely to develop as these organizations discover their intersecting interests in common third parties such as nation-states, regional organizations, and various intergovernmental organizations. Occupations whose activities fall within multinational corporations and those that are organized into international occupational associations are growing in number and diversity. As these types of organizations proliferate, an increasing proportion of members within a growing population of occupations will perform part of their occupational roles in foreign contexts.

Collectively and cumulatively, multinational corporations, international nongovernmental organizations, and regional organizations interact with one

² Cf. White (1951); Evan (1962d); Smoker (1965); Galtung (1968); Angell (1968); and Kriesberg (1968).

³ Cf. Vernon (1967); Robinson (1967, 1969); Fouraker and Stopford (1968); Kindleberger (1969); Behrman (1969a, b); Rolfe (1969); and Perlmutter (1969a).

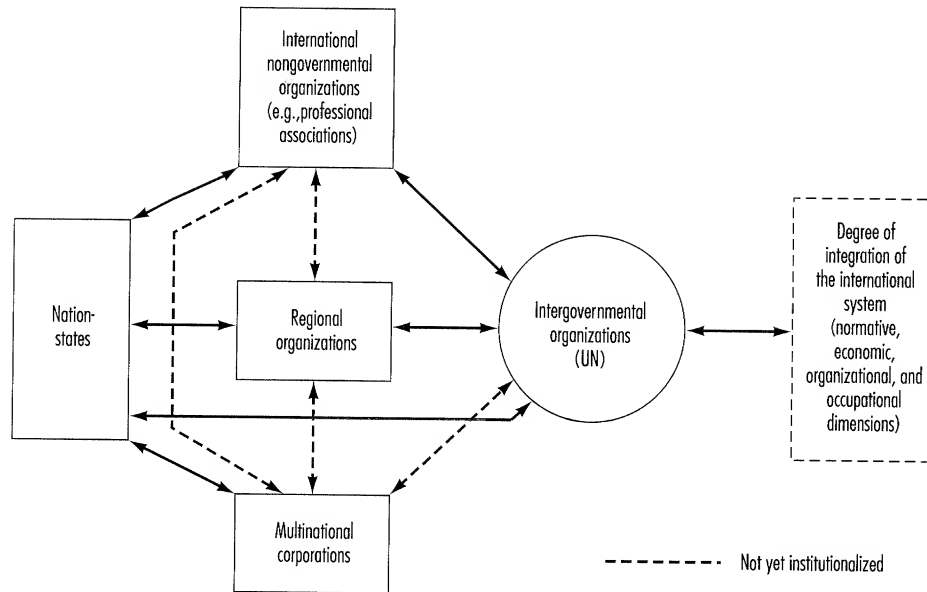


Figure 18.3 Nonlinear model of the integration of the international system.

another and with nation-states and intergovernmental organizations in such a manner as to increase the degree of integration of the international system along four dimensions: normative, economic, organizational, and occupational.

With the aid of our nonlinear model of the integration of the international system (see Figure 18.3), I shall now consider in turn the growth and system linkages of multinational corporations and international professional associations.

GROWTH AND SYSTEM LINKAGES

Multinational Corporations

Although the term “multinational corporation” has become current only in the past few decades, the phenomenon of international business operations is, of course, not new.

The first wave of foreign investment by manufacturing companies began in the closing decades of the nineteenth century, and continued, gathering strength, up to 1914. Much of it was American, not only in Canada . . . but also in Europe. . . . A few European companies were also beginning to expand abroad. Lever set up his first soap factory outside Britain in 1899, and Alfred Nobel was establishing armament factories all over Europe (Miles, 1969).

In the interwar years, direct foreign investment scarcely grew. It was in the 1950s that the second great wave of international business investment began. "Between 1950 and 1967 the United States' capital stake in European manufacturing industry increased more than ten times, to a figure of \$9,800,000,000 in the latter year" (Miles, 1969). Other major industrial countries such as Britain, France, West Germany, Canada, and Japan also participated in the burgeoning growth of the multinational corporation.

One of the factors that stimulated the exponential growth of multinational corporations is the emergence of the European Economic Community (Rolfe, 1969; Kaufmann, 1970). It is now recognized that American corporations have taken more advantage of the economic opportunities created by this regional organization than European corporations themselves, so much so that it has prompted Servan-Schreiber (1968) to deplore this trend and exhort his fellow Europeans to ward off the invasion of the American enterprise.

Notwithstanding the rate of growth of multinational corporations, data on this type of firm, particularly of an organizational nature, are hard to come by. For the first time in its history, the Union of International Associations (1969: 1189–1214) included a section on multinational corporations in the twelfth edition of its *Yearbook on International Organizations*. In a preliminary survey, the *Yearbook* reports 7,045 parent companies in 14 European countries and the United States with affiliates in one or more countries. Omitted from this survey are data on Japan, Canada, Communist countries, and others, presumably because they were unobtainable. A subset of these corporations with affiliates in 10 or more countries, totaling 590, is listed by name, which suggested the analysis presented in Table 18.1 of the nationality of the corporate headquarters of these organizations. Of these relatively large multinational corporations, 46 percent are American, 26 percent are British, 7 percent are German, and 7 percent are French, with the remainder distributed among eight European countries. Underlying this uneven distribution of parent companies among countries is a differential in economic development. This is borne out by a statistically significant rank-order correlation coefficient of 0.39 (Kendall tau) between the number of multinational firms in a country and its GNP per capita, shown in Table 18.2.

Although no consensus has yet been reached as to the definition of a multinational corporation, it is evident from the foregoing discussion that we are dealing with a relatively large firm with extensive resources in many countries. "A multinational company does more than import and export from its . . . home plant. It may do research in Germany, engineering design in Japan, and then manufacture in Taiwan, Italy, and Mexico to supply a hundred national markets, including the . . . [home] market in which its headquarters may be located" (Rutenberg, 1970: B-337). To perform such highly complex operations in a multitude of differing environments, it is necessary to transfer products, capital, managers, and other technical personnel as well as technology. The extensive transfer of the factors of production points to some of the effects—functional as well as dysfunctional—the multinational corporations are having on their host countries.

Table 18.1 *Country of Corporate Headquarters of Multinational Firms by Number of Countries in Which Affiliates Are Located*

Country of Headquarters	Number of Countries in Which Affiliates Are Located							Total	%
	10-12	13-15	16-20	21-25	26-30	31-40	41+		
Denmark	3	—	—	—	—	—	1	4	1
Netherlands	8	2	4	2	2	—	1	19	3
United Kingdom	47	31	43	14	10	5	3	153	26
United States	92	59	40	37	18	14	9	269	46
Germany (FR)	18	10	9	1	2	2	—	42	7
Italy	—	2	2	4	1	1	—	10	7
Sweden	10	4	3	2	5	2	—	26	4
Switzerland	8	3	3	2	—	2	—	18	3
France	19	6	8	5	2	—	—	40	7
Belgium	3	2	1	—	—	—	—	6	1
Norway	—	—	1	—	—	—	—	1	^a
Austria	—	2	—	—	—	—	—	2	^a

Source: Union of International Associations (1969: 1203, Table 3)

^a Less than 0.5 percent.

Table 18.2 *Rank-Order Correlation of Number of Multinational Firms of a Country and Its GNP per Capita**

Country of Headquarters	Number of Multinational Firms	Rank Order	GNP/Capita (000 U.S. Dollars)	Rank Order
United States	2,816	1	8.8	1
United Kingdom	1,651	2	1.9	8.5
Germany	801	3	2.0	6.5
France	471	4	2.1	5
Switzerland	349	5	2.5	3
Netherlands	222	6	1.7	10
Sweden	219	7	2.7	2
Belgium	197	8	1.9	8.5
Italy	101	9	1.2	12
Denmark	82	10	2.3	4
Norway	78	11	2.0	6.5
Austria	38	12	1.4	11
Spain	9	13	0.8	13

* $\tau = .39$, significant at .03.

Source: Union of International Associations (1969: 1189).

The most proximate effect is on the host countries in which affiliates are located. By employing nationals in various capacities, from unskilled laborers to professional and managerial personnel, the parent company creates many new employment and career opportunities in the host country. Although no overall figure is available as regards the number of people employed in various countries by the 7,045 multinational corporations reported in the *Yearbook*, one estimate for approximately 3,000 American parent companies is 5,000,000 foreign employees, a staggering number that exceeds the size of the labor force of many countries. And for 1,000 Swedish companies operating in 70 countries, the estimate is 200,000 foreign employees (Kindleberger, 1969: 88). Invariably, employees in host countries are the recipients of new bodies of knowledge and skills essential to operate the technology transferred by the parent company (Rolfe, 1969: 48–60). As one researcher on the transfer of technology observes:

Repeatedly, multinational companies operate training programs for host country nationals on a scale which is equivalent to adding a large technical high school in the country. They train nationals as operators, functional executives, and eventually as top managers. Trained people who leave such companies often seed domestic organizations with competent personnel and so diffuse know-how elsewhere in the economy. (Quinn, 1969)

Apart from such beneficial effects on a segment of the host country's labor force and in turn on the standard of living of employees, the inflow of foreign capital potentially stimulates economic development. On the other hand, the outflow of capital from the home country of the parent corporation may have dysfunctions for the labor force of the home country. Trade union officials in the United States point to a loss of jobs due to capital and technology transfers by multinational firms (Adam, 1971; Anonymous, 1970: 95–98). To counteract the threat posed by the internationalization of the corporation, trade unions are developing strategies for multinational union organization and collective bargaining (Casserini, 1972).

As for reciprocal effects, that is, of the host country on the parent company, several are noteworthy. First, the host country grants the company the legal protection of incorporation. Second, it subjects the company to taxation that may be of economic as well as political importance to the host government. And third, as a condition for admission, particularly in a developing country, the parent company may be required to enter into a joint venture with the host government as a partner.

Less proximate effects of the multinational firm may be discerned in the changing relations between nation-states. By virtue of the fact that these firms operate production facilities in various countries, they stimulate trade among nation-states. And to the extent that they have recourse to vertical integration, international trade includes the transfer of products among affiliates of multinational firms:

Trade is no longer simply the result of national middlemen in one country interacting with importers in another. International firms have taken over, and there is every indication that international business is now the dominant factor in determining changes in the pattern of world exports as well as capital flows. . . . The movement of goods across national boundaries becomes foreign trade and exports even though the goods are only being transferred from one unit of the firm to another unit of the same firm. . . . A large and growing share of world exports and changes in them are . . . accounted for by internal product movements of the international company. (Robock and Simmonds, 1970)

Moreover, because such firms often have similar operations in more than one country, there is a tendency over time to standardize technology (Behrman, 1969a: 74–75; Kindleberger, 1969: 84–86). There is also a tendency to standardize various policies, including wage scales. At least one international economist has suggested that such companies are exerting an influence in the direction of wage equalization, thus in the long run contributing to a reduction of one source of income inequality between nations (Kindleberger, 1969: 34–35, 188).

Yet another impact of these firms on the relationships between nation-states is the recent emergence of what Perlmutter (1969b: 39–50) has called the “trans-ideological venture.” To modernize their industrial plant, Communist countries have encouraged their state-owned enterprises to enter into coproduction contracts with Western firms. Such contracts usually provide for the cooperative manufacture of finished industrial products. As a rule, a Western firm contributes a technologically sophisticated component that an Eastern firm uses to produce a finished product salable in highly competitive markets (Herman, 1969). Several examples of East-West ventures are as follows:

(a) IKEA, a Swedish furniture chain, supplies to associates in Poland machinery and designs under its technical control for the semimanufacture of furniture, which is then shipped to Sweden for finishing by IKEA.

(b) The U.S. based Simmons Machine Tool Corporation has agreed with Czechoslovakia’s Skoda to have the latter produce a line of specialized heavy equipment under the Simmons-Skoda trademark. The U.S. firm has exclusive sales rights in the Western Hemisphere, but there are no other territorial limitations for either side.

(c) Krupp of Essen, Germany, and the Csepel machine tool factory of Hungary have jointly developed digitally controlled short lathes based on German designs and drawings, which are to be exported to Germany and other markets. (Perlmutter, 1969b: 39–40)

The benefits derived from such ventures are mutual. According to one scholar:

To the Western firm, they represent an opportunity to expand its market, while reducing to a minimum the drain on the limited hard currency funds of the East European partner. To the state enterprise in the East, a joint venture provides

a practical opportunity to broaden its technological horizon, to study advanced management practices and to learn the contemporary marketing techniques of the commercial world. (Herman, 1969: 53)

Operating within and between sovereign states exposes the multinational firm to various hazards, chief of which, of course, is nationalization by a host country. Other hazards do not affect all multinational firms alike. If the home government, as in the case of the United States, restricts expansion of enterprises through horizontal integration, such firms can be subject to antitrust law violations. Another restriction on the operations of multinational firms occurs when a home government, in exercising its rights of extraterritoriality, intervenes in the operations of a subsidiary in a host country. A case in point is when the United States, committed to a policy of preventing the proliferation of nuclear weapons, prohibits IBM's subsidiary in France from selling the French government a particular type of computer needed for the production of nuclear bombs (Kindleberger, 1969: 43).

Such risks and restrictions, stemming from the fact that the multinational company is a citizen of several sovereign states, have prompted some scholars to speculate about a new legal status for this type of organization. Instead of being subject to various sovereignties, they advocate that the multinational firm be chartered, taxed, and controlled by an international organization, perhaps some agency of the United Nations (Robinson, 1964a: 224). If such a transformation in legal status were ever wrought, the United Nations and the international system obviously would be the primary beneficiaries. The United Nations would have a greatly expanded source of income from many thousands of companies to finance adequately its own activities as well as the urgent development programs of many poor member states, thus substantially strengthening the economic, organizational, and normative levels of integration of the international system.

An ongoing study, initiated in 1972 by the Department of Economic and Social Affairs of the United Nations (1973: pp. 92-93) is considering alternative mechanisms for international regulation of the multinational corporation. Various proposals are being entertained: "a multilaterally negotiated charter and an international organization . . . to administer it"; "a GATT [General Agreement on Tariffs and Trade]-type of agreement for multinational corporations"; "some general agreement on a code of conduct for multinational corporations"; and "an international company law . . . administered by a body of the signatory countries."

In short, the multinationalization of the corporation has brought into being a new "transnational actor" that intentionally or unintentionally affects nation-states and relations among nation-states (Vernon, 1972; Wells, 1972). As Wells (1972: 113) puts it:

Multinational business enterprises are clearly important transnational actors. They move large amounts of resources across international boundaries. Some of them have organizations that centralize decision-making processes so that these resources can be used to fulfil objectives that may be at variance with those of a particular

country in which a subsidiary is located. These firms have at their disposal many tools for frustrating governmental policies, but the policies that they frustrate may be those of the host government or those of the home government.

Some multinational enterprises may seem to form alliances with governments. Yet, as they grow and begin to take a more global view, these alliances may prove to be no more lasting than those of nation-states. . . .

The fact that some of these organizations are operating in a coordinated fashion or that they even seem to have the potential for doing so makes them appear to governments as a challenge to their control. The result is a feeling of frustration on the part of governmental officials that results in occasional lashing out at foreign investment. . . . The desire of the government to retain control leads to attacks on enterprises that appear to challenge its sovereignty.

At the level of home and host countries, multinational corporations have dysfunctional as well as functional effects. Issues have been raised in home countries concerning exploitation of cheap labor markets, tampering with national sovereignty, suppression of local entrepreneurial initiative, and promotion of "dependencia," or neocolonialism; in host countries the loss of jobs due to the outflow of capital has aroused protests from trade unions.

At the aggregate level of the international system, the multinational corporation may also have dysfunctional as well as functional effects. Attention has focused on "hot money" movements, effects of intracorporation transactions on international trade, and taxation of the multinational corporations (United Nations, Department of Economic and Social Affairs, 1973: 60–65). Nonetheless, the unintended functional effects of the operations of multinational firms in fostering international integration merit equal attention: new patterns of economic interdependence among nation-states, new networks of relationships among enterprises, new roles for occupations, new patterns of transnational relationships among occupations, and new or incipient norms governing the transactions of multinational firms with nation-states, regional organizations, intergovernmental organizations, and international nongovernmental organizations.

International Professional Associations

Although it antedates the multinational corporation, the international professional association is also essentially a twentieth-century phenomenon. What is more, like the multinational corporation, its growth rate in the past few decades has been impressive (Skjelsbaek, 1972). It is by far the most numerous and probably the most influential type of organization in the class usually referred to as international nongovernmental organizations, or INGOs. In a study of INGOs, Smoker (1965) found that the rate of their formation between 1870 and 1960 increased exponentially, except for two slumps associated with World Wars I and II. This finding very likely applies to international professional associations as well.

From the perspective of the sociology of occupations, we are dealing with a group of occupations that are either full-fledged professions or in the process of

professionalization (Evan, 1969b, 100–101). In either case, professional associations are formed in order to contribute to the fund of technical and systematic knowledge underlying an occupation, to promote an orientation of service to society rather than self-interest, and to increase autonomy in professional practice. Some professions, such as medicine, law, the ministry, and teaching, have ancient origins; others have come into being as a result of the emergence of industrialism and the rise of modern science and technology. Wilensky (1964) suggests that the transformation of an occupation in accordance with the two primary characteristics of a profession, that is, possession of a body of abstract knowledge and commitment to an ideal of service entails the following sequence of stages: (1) full-time performance of the occupational function; (2) establishment of a school that is not connected with a university; (3) establishment of a university school; (4) formation of a local professional association; (5) formation of a national professional association; (6) enactment of a licensing law; and (7) development of a formal code of ethics.

Even if this sequence of stages is neither invariant nor exhaustive, we would expect as a rule that international professional associations would emerge following the formation of national professional associations. Thus, in the case of the engineering profession, local professional associations were established in various parts of England and Scotland during the latter part of the eighteenth century. In 1818 the first national professional association, the Institution of Civil Engineers, was established in England. Similar organizations came into existence in the United States in 1852 and in Canada in 1887. Almost a century later, several regional associations of engineering were founded, such as the European Federation of National Associations of Engineers, and several highly specialized international associations, such as the World Power Conference. It was not until 1951 that the Union of International Engineering Organizations, an omnibus international association (referred to by Galtung [1967] as a super-INGO), was formed under the aegis of UNESCO.

In the development of modern science, it is also possible to identify a sequence of stages of professionalization that, however, differs in some respects from that of engineering. Already at the stage of the formation of local professional associations there is an active interest in facilitating the dissemination of knowledge and the collaboration among scientists across national boundaries. With the advent of modern science, learned societies and academies were founded, such as the Royal Society of London in 1662, the Académie des Sciences in Paris in 1666, and, several decades later, the Berlin Academy of Sciences and the Academy of St. Petersburg. In an address commemorating the three-hundredth anniversary of Isaac Newton, the renowned Russian physicist Peter Kapitza referred to Newton's active role in the affairs of the Royal Society. He observed that the Royal Society

in contrast to all academies, has still the character of a non-state society. . . . Since the very beginning of its existence, the Royal Society has maintained contact with

many foreign scientists. Sometimes foreigners were elected as Foreign Members of the Society, including our scientists Euler, Kruzenshtern, Struve, Chebyshev, Mechnikov, Pavlov, Timiryazev, Golitsyn. . . . Since Newton's times, the Royal Society has maintained a lively contact with scientific societies the world over. (Ter Haar, 1967: 139)

Until the eighteenth century, the scientific community was relatively small, and communication was facilitated by the use of common languages—Latin and French—and a common core of knowledge, since there were still few fields of specialization. With the growth of the scientific community and the multiplication of specialties in the nineteenth century, national and international associations arose. One of the oldest international scientific organizations, the International Meteorological Committee, was founded in 1872. Numerous other international associations were subsequently founded, so that by the end of World War I there was a felt need for a new association to coordinate the multitude of scientific organizations, thus giving rise in 1919 to a super-INGO called the International Council of Scientific Associations (Organization for Economic Cooperation and Development, 1964).

For a more precise assessment of the growth of different types of international professional associations, we turn again to the invaluable *Yearbook* of the Union of International Associations. Over the years, this organization has struggled with the problems of classifying INGOs. In its twelfth edition, 19 categories of organizations were presented, from which I have selected the following 7 that appear to include a great variety of professional associations: Social Sciences; Law; Administration; Professions, Employers; Economics, Finance; Technology; Science; Health, Medicine (Union of International Associations, 1969: 13). Examining various editions of the *Yearbook* yielded data, shown in Table 14.3, on the number of associations reported in each of these 7 categories for a 60-year period, from 1909 to 1969.

The first noteworthy finding is that as of 1969, there were 757 international professional associations that constituted 50 percent of the population of 1,515 active INGOs for that year. In all likelihood, this percentage underestimates the total number of INGOs that were in fact engaged in professional activities. A reclassification of the population of associations in the *Yearbook* would probably yield a higher percentage. Second, over the 60-year period, these associations increased about tenfold; and during 1951–1969, they increased about 169 percent. The average annual percentage increase in 1951–1969 is about 9 percent, a striking growth rate that approximates that of the multinational corporation.

The findings in Table 18.3 leave unanswered at least four important questions concerning the growth of international professional associations: (1) How many national professional associations and individual members are involved in these 757 INGOs? (2) How many nation-states indirectly participate in these associations? (3) How widely dispersed is nation-state participation geographically as well as ideologically? (4) What are the annual budgets of these associations?

A partial answer to the third question concerning the distribution of participation in these associations was gleaned from some data reported by the Union

Table 18.3 Growth of International Professional Associations

Category	Number					Percent Increase		Average Annual Percent Increase Since	
	1909-1910	1951-1952	1956-1957	1966-1967	1968-1969	1909-1969	1951-1969	1909	1951
Social Sciences	10	35	57	80	90	800	157	13.33	8.26
Law, Administration	13	30	28	48	54	315	80	5.25	4.21
Professions, Employers	2	34	67	93	105	5,150	208	85.88	10.99
Economics, Finance	3	14	15	35	40	1,238	185	20.55	9.77
Technology	8	35	36	83	102	1,175	191	19.58	10.07
Science	21	56	69	137	152	623	171	10.38	9.02
Health, Medicine	16	77	100	173	214	1,237	178	20.62	9.26
TOTAL	73	281	372	649	757	939	169	15.61	8.91

Source: Union of International Associations, *Yearbook of International Organizations*, Brussels: 1948, 1952, 1957, 1967, 1969.

of International Associations. In Table 18.4, data on the nationality of the principal officials (viz., the president and secretary general) of the 757 associations are tabulated. Examining the column total of the number of officials for each of the 44 countries listed suggests a rather uneven distribution. France tops the list with 202 officials, and four countries (Guatemala, Peru, Malaysia, and the UAR) have but one official each. Thirteen of the 44 countries with a range of 202 to 11 officials are arrayed in Table 18.5. Also included in Table 18.5 is a rank order for the same countries according to the number of multinational firms, which information is reproduced from Table 18.2. The resulting rank-order correlation coefficient of 0.69 (Kendall tau) between the number of multinational firms in a country and the number of principal officials of international professional associations is significant at 0.0005. It suggests that this dimension of participation in international professional associations is in part a function of economic development, since as the development of a country increases, so does the proportion of professionals in the labor force. Some evidence in support of this interpretation is provided by partialing out the effect of economic development (as reflected in GNP/capita) on the rank-order correlation coefficient. When this is done, the original Kendall tau of 0.69 is reduced to 0.55.

Table 18.4 *Nationality of Principal Officials of International Professional Associations*

Country	Social Sciences		Law, Administration		Professions, Employers		Economics, Finance		Technology		Science		Health, Medicine		Total by Country	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Africa																
Ghana	—		—		—		—		—		2	1	—		2	^a
Nigeria	—		1	1	—		—		—		—		1	^a	2	^a
UAR	—		1	1	—		—		—		—		—		1	^a
Others	—		1	1	2	1	—		1	1	2	1	—		6	1
America																
Argentina	3	2	—		—		—		1	1	1	^a	3	1	8	1
Brazil	2	1	1	1	—		—		—		1	^a	2	1	6	1
Canada	—		1	1	4	3	—		1	1	6	2	6	2	18	2
Chile	—		—		—		—		1	1	—		2	1	3	^a
Columbia	—		2	2	—		—		1	1	—		1	^a	4	^a
Guatemala	1	1	—		—		—		—		—		—		1	^a
Mexico	3	2	—		1	1	1	2	3	2	—		1	^a	9	1
Peru	—		1	1	—		—		—		—		—		1	^a
United States	22	16	12	14	7	4	10	19	5	4	36	15	41	14	133	12
Uruguay	—		—		2	1	—		1	1	—		4	1	7	1
Venezuela	—		—		1	1	—		—		—		1	^a	2	^a
Others	—		1	1	1	1	—		—		—		1	^a	3	^a
Asia																
India	—		1	1	1	1	—		3	2	7	3	1	^a	13	1
Israel	1	1	—		—		—		—		1	^a	3	1	5	^a
Japan	2	2	2	2	—		—		2	1	5	2	7	2	18	2
Malaysia	—		—		—		—		—		—		1	^a	1	^a
Philippines	—		2	2	—		—		—		—		2	1	4	^a
Other	—		1	1	—		—		—		2	1	1	^a	4	^a
Australasia																
Australia	—		—		—		—		1	1	2	1	2	1	5	^a
New Zealand	1	1	—		—		—		—		1	^a	—		2	^a

^a Less than .5 percent.Source: Anonymous, "The Leaders of International Organizations and Their Nationality," *International Associations*, 19 (May 1967), pp. 345-355

Given the number and growth rate of international professional associations, what effect are they having on the process of integration of the international system? In the absence of relevant systematic research, I shall approximate an answer to this question with the aid of the nonlinear model of integration of the international system presented in Figure 18.3. This entails mapping the interaction patterns of these organizations with other components of the

Table 18.4 Nationality of Principal Officials of International Professional Associations (continued)

Country	Social Sciences		Law, Administration		Professions, Employers		Economics, Finance		Technology		Science		Health, Medicine		Total by Country	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Europe																
Austria	1	1	1	1	3	2	—	—	1	1	3	1	3	1	12	1
Belgium	16	12	10	12	22	14	11	20	11	8	14	6	22	7	106	9
Czechoslovakia	1	1	—	—	—	—	—	—	—	—	1	^a	—	—	2	^a
Denmark	5	4	1	1	4	3	—	—	2	1	8	3	10	3	30	3
Finland	—	—	—	—	1	1	—	—	—	—	1	^a	—	—	2	^a
France	21	16	15	18	38	24	10	19	31	23	31	13	56	19	202	18
Germany	6	4	5	6	6	4	2	4	12	9	9	4	10	3	50	4
Greece	1	1	1	1	1	1	—	—	—	—	—	—	—	—	3	^a
Hungary	—	—	—	—	—	—	—	—	1	1	1	^a	1	^a	3	^a
Ireland	2	1	—	—	—	—	—	—	—	—	—	—	—	—	2	^a
Italy	9	8	3	4	10	6	1	2	4	3	6	2	20	6	53	5
Luxembourg	—	—	2	2	—	—	—	—	—	—	—	—	—	—	2	^a
Netherlands	13	10	2	2	9	6	7	13	9	7	20	8	14	5	74	7
Norway	—	—	—	—	1	1	1	2	2	1	5	2	4	1	13	1
Poland	2	1	—	—	—	—	—	—	1	1	1	^a	—	—	4	^a
Portugal	—	—	—	—	—	—	1	2	—	—	—	—	2	1	3	^a
Rumania	1	1	—	—	—	—	—	—	1	1	1	^a	1	^a	4	^a
Spain	1	1	2	1	1	1	—	—	1	1	1	^a	5	2	11	1
Sweden	3	2	1	1	9	6	2	4	3	2	5	2	8	3	31	3
Switzerland	10	7	5	6	13	8	4	7	14	10	31	13	28	9	105	9
U.K.	4	3	13	15	22	14	4	7	22	16	4	2	37	12	138	12
U.S.S.R.	1	1	—	—	—	—	—	—	1	1	2	1	—	—	6	1
Yugoslavia	1	1	1	1	—	—	—	—	—	—	1	^a	—	—	3	^a
Others	1	1	—	—	1	1	—	—	—	—	—	—	—	—	4	^a

^a Less than .5 percent.Source: Anonymous, "The Leaders of International Organizations and Their Nationality," *International Associations*, 19 (May 1967), pp. 345-355

international system. To do this, I shall first consider some of the activities of these organizations.

The principal functions of these associations are to convene congresses and other special meetings, publish conference proceedings and research reports, facilitate an exchange of visits, stimulate collaborate research, and the like. In organizing a congress, the international professional association depends upon the cooperation and assistance of its member organizations in various countries. Of the estimated 3,000 to 4,000 international congresses of INGOs held annually, involving at least one million people, probably one-half are convened by international professional associations (Judge, 1969: 144). It is, therefore, no

Table 18.5 Rank-Order Correlation of Number of Multinational Firms by Nationality of Corporate Headquarters and Number of Principal Officials of International Professional Associations by Nationality*

Country of Headquarters	Number of Multinational Firms	Rank Order	Number of Principal Officials of International Professional Associations	Rank Order
United States	2,816	1	133	3
United Kingdom	1,651	2	138	2
Germany (FR)	801	3	50	8
France	471	4	202	1
Switzerland	349	5	105	5
Netherlands	222	6	74	6
Sweden	219	7	31	9
Belgium	197	8	106	4
Italy	101	9	53	7
Denmark	82	10	30	10
Norway	78	11	13	11
Austria	38	12	12	12
Spain	9	13	11	13

* $\tau = .69$, significant at .0005

Source: Union of International Associations (1969: 1189); *International Associations*, 19 (May 1967), pp. 354-355

wonder that the problems of planning and managing congresses have themselves become the subject of international congresses (Union of International Associations, 1961).

On the occasion of the Fifth World Congress of Sociology in 1962, Lazarsfeld and Leeds (1962) pointed out that congresses perform three important interrelated functions: they afford an opportunity for personal contacts, stimulate joint research projects, and sensitize participants to theoretical perspectives of members from different countries. That personal contacts, in turn, increase sensitivity to foreign perspectives was noted by T. H. Marshall, a former president of the International Sociological Association:

When representatives of countries in which the Marxist-Leninist philosophy prevails began to attend international Congresses and meetings in Western Europe, and when, under the auspices of Unesco, similar meetings were held in one or other of the countries of Eastern Europe, there was naturally some tension in

the air, and mutual suspicion, tempered by curiosity and a genuine desire to understand. Friendly debate took place in its early stages, more as an exchange of views between two sides than as the free intercourse of independent minds. But by the early 1960's things had changed; the experience of attending fully representative international meetings had become a familiar one, and many of the participants were now old friends. Ideological differences still make themselves felt, of course, and they are sometimes stimulating and sometimes frustrating, but a big step forward has been made towards finding a common ground of scientific discourse on which all can meet without distinction of national origin or political allegiance. It remains to be seen whether, or within what space of time, this idea can be fully realized. (UNESCO, 1966: 11)

The various functions performed by international professional associations tend to increase the bonds between the parent international organization, as it were, and the affiliated national organizations, that is, the national professional associations in the various nation-states. And by eliciting the participation of national professional associations from various nation-states, the international professional association unintentionally creates a network of relationships between nation-states. This is especially true for those associations that are relatively free of ideology. Thus, for example, Kriesberg (1968: 471) found that in health and science INGOs, in which consensus is presumably high, participation of professional associations from the United States and the U.S.S.R. is higher than in INGOs in which consensus is low, such as those dealing with international relations, art, and religion.

There are also other links with nation-states, one of which is of considerable moment to the international professional association. The nation-state is the source of incorporation of this type of association. Depending on how liberal its incorporation law is, it affects the legal status of the association and, more specifically, such rights as owning property, holding funds, entering into contracts, transferring funds from one country to another, and the freedom of its representatives to travel over the world (Rodgers, 1960). Another link with the nation-state that is quite different involves rendering expert professional guidance, as in the case of the International Statistical Institute, which has helped nations with their censuses to ensure high professional standards and comparable classifications (Keyfitz, 1968: 235; White, 1951: 171). In addition, a variety of medical associations, such as the International Union Against Tuberculosis, have aided nation-states in combating diseases.

Compared with the links between the international professional association and the nation-state, those with regional organizations are probably fewer. The European Economic Community has accorded consultative status to various INGOs, some of which would fall into the category of professional associations (Schokking and Anderson, 1960: 392-395). In all likelihood, *regional* professional associations, such as the European Federation of National Associations of Engineers, develop closer ties with the European Economic Community than do *international* professional associations. This may also be true in other regional communities, such as the Latin American Free Trade Area, and

their corresponding professional associations, for example, the Pan-American Federation of Engineering Societies.

As regards the bonds between the international professional association and the multinational firm, they seem somewhat tenuous. Several international professional associations, such as the international arbitration tribunals of the International Chamber of Commerce and Inter-American Commercial Arbitration Commission, perform a direct service to multinational corporations by helping them resolve conflicts outside the framework of judiciaries of nation-states (American Management Association, 1965: 134–78). In view of the fact that there is a high overlap in membership of engineers and scientists in international professional associations and multinational firms and that both organizations struggle with the ambiguities of operating across national boundaries, one would expect a variety of types of interactions to develop among these organizations. It can reasonably be predicted that when each type of organization becomes fully cognizant of the other's existence—and the Union of International Associations already is, witness the addition of a section of multinational corporations in its *Yearbook*—new patterns of interaction will emerge that may significantly increase the level of organizational and possibly also normative integration of the international system.

By far, the most highly developed interaction patterns are observable between international professional associations and intergovernmental organizations, or IGOs. This is to be expected, since some INGOs have for a long time sought to influence the decisions of IGOs. The fact that INGOs are accorded consultative status to the Economic and Social Council of the United Nations and its many specialized agencies, such as the International Labor Organization, the World Health Organization, and UNESCO, has encouraged the growth of INGOs—so much so that it has been asserted that “every IGO . . . has at least one counterpart in the INGO world” (Rodgers, 1960: 8). The reciprocal effects between these two types of organizations have been extensive. Some international professional associations have been instrumental in the formation of some IGOs, and, in turn, some IGOs have created some international professional associations.

According to an official of the International Labor Organization:

Medical specialists from different countries gradually formed contacts, and so there came into being the International Committee on Industrial Medicine which before the War Organized International Congresses on Industrial Diseases, the first in Milan in 1900. . . .

The year 1900 saw the foundation at Paris of the International Association for [Labor Legislation], with headquarters at Basle, which represented the first attempt to make an international collection of legislative measures relating to industry, and which arranged for the holding of meetings where problems of hygiene and pathology were discussed resulting in the drawing up of Conventions, such as the Berne Convention relative to the prohibition of the use of phosphorus in the making of matches (1908).

Such tentative suggestions and efforts paved the way for the post-war creation of the International Labour Organization. (White, 1951: 171–172)

The unique role of UNESCO in creating and reorganizing various international associations in the social sciences and in establishing two super-INGOs, the International Social Science Council and the International Committee for Social Science Documentation, is well known (UNESCO, 1966). Less well known, and of considerable importance, is the fact that UNESCO provides subventions to various international professional associations to supplement their meager budgets.

In short, there already exists an elaborate network of relationships between international professional associations and various components of the international system.

SOME HYPOTHESES ON THE INTEGRATION OF THE INTERNATIONAL SYSTEM

In our discussion of alternative models of the international system, we observed the operation of forces conducive to normative and economic integration. From our analysis of the growth and interaction patterns of multinational corporations and international professional associations, two additional forces appear to be developing—organizational and occupational integration. The many thousands of multinational firms have elaborate relationships with numerous other business organizations in different countries as well as with many host-government agencies and international governmental organizations. Similarly, the hundreds of international professional associations have developed in the past few decades an intricate network of relationships, as we have seen, with various components of the international system.

Each type of organization is generating, wittingly or unwittingly, loyalties—organizational in the case of the multinational firm and occupational in the case of the international professional association—that cut across national boundaries. In effect, both types of organizations are socializing their members into the values of transnationalism, that is, identifying with the objectives of “an organization which transcends national borders without comprising nations; it is subnational, yet international” (Galtung, 1967: 313). Thus, we hypothesize that these emergent loyalties are raising the level of integration of the international system. To test this general hypothesis would require operationalizing the non-linear model of the international system presented in Figure 18.3 and gathering systematic data, a complex undertaking that would challenge the ingenuity of a team of social scientists. By way of illustrating the potential value of such an endeavor, I shall consider several more specific propositions applicable to both types of organizations.

It is frequently asserted that multiple affiliations breed multiple loyalties, and that if the latter transcend national boundaries, they can act as a break on international conflict (LeVine, 1966: 45–69). Human networks “based on cross-cutting professional and other interests, can contribute to the stability and integration of the international system by counteracting tendencies toward

polarization along national lines. They create a vested interest in maintaining a pluralistic and peaceful international order" (Kelman, 1970). Assuming these are plausible, if not validated, propositions, do they have any implications for the organizational design and functioning of multinational corporations and international professional associations? In Table 18.6, I have identified several structural and motivational variables in terms of which comparative research on both types of organizations could be undertaken that would throw light on their actual or potential impact on the level of economic, organizational, occupational, and normative integration of the international system (Smoker, 1968: 501).

The first structural variable—nationality of the stockholders of the firm and of the principal officers and staff of the association's headquarters—is undoubtedly of critical importance. Most multinational corporations—so defined in terms of the nature of their operations in various countries—are owned by stockholders from one or a few nations. "A firm owned and managed multinationally would, almost by definition, be transnational," that is, its "members develop loyalties toward the firm . . . which transcend national identities so that national bias in decision making virtually disappears" (Robinson, 1964b). Rupert (1967: 231), chairman of Rothmans of Pall Mall Group of Companies, argues in favor of a particular scheme of multinational ownership, according to which "at least 50 per cent of the shares in each separate member company is held locally

Table 18.6 *Within and Between Comparisons of Multinational Corporations and International Professional Associations on Structural and Motivational Dimensions*

<i>Dimension</i>	<i>Multinational Corporation</i>	<i>International Professional Association</i>
A. Structural		
1. Nationality of stockholders and/or principal officers and HQ staff	One or few vs. many nations	One or few vs. many nations
2. Authority	Centralized vs. Decentralized	Collective vs. individual membership
3. Interface functions of HQ staff	Low vs. high ratio of boundary/nonboundary personnel	Low vs. high ratio of boundary/nonboundary personnel
4. Movement of HQ staff between parent organization and affiliates	Low vs. high rate of rotation of managerial and technical personnel	Low vs. high rate of visits from HQ to member organization and vice versa
B. Motivational		
1. Local vs. cosmopolitan orientation	Loyalty to affiliate vs. loyalty to parent company or both	Loyalty to national association vs. loyalty to international association or both
2. Attitude toward legal status of the organization	Preference for incorporation under nation-state vs. under UN or other international agency	Preference for incorporation under nation-state vs. under UN or other international agency

by the nationals of the host country, and the chairman and majority of Board Members in every country are citizens of that country." Another multinationally owned company, Adela, invests in Latin America in partnership with local capital (Oppenheim, 1967: 116). By contrast, General Motors insists on 100 percent ownership "so that the full benefits of central control can be obtained" (Oppenheim, 1967: 117).

A comparison of multinationally owned companies, such as those Rupert describes, with those owned uninationally or binationally would presumably disclose important differences in interaction patterns with other organizations in their environments. A comparison could also be made of international professional associations whose officers and staff are drawn predominantly from one or a few nations versus many nations to discover, for example, whether in the latter case the network of interorganizational relations is more developed.

Hypothesis 1: *Multinational ownership of corporations and multinational leadership of international professional associations, as contrasted with unination ownership of corporations and unination leadership of international professional associations, result in denser networks of interorganizational relationships and, in turn, contribute to a higher level of organizational and economic integration of the international system.*

The second structural variable, authority, is frequently discussed in the literature on the multinational firm but rarely, if ever, investigated. Arguments are advanced for the relative merits in a particular industry of a centralized versus a decentralized structure of authority. General Motors, Massey-Ferguson, and Krupp are cited as examples of highly centralized companies (Oppenheim, 1967; Rupert, 1967). On the other hand, Bata (1967), in discussing communication in his shoe manufacturing company—84 companies in eight countries—describes it as a decentralized firm. If a comparative study were undertaken of centralized versus decentralized firms, preferably in the same industry to control for type of products manufactured and technology employed, we could learn the consequences of contrasting authority structures for the network of interorganizational relationships.

A functionally equivalent variable of authority structure in the case of the international professional association is whether the unit of membership is the individual professional or a collectivity, such as a national, regional, or international association. In most international professional associations—in fact, in most INGOs in general—the unit of membership is the national association (White, 1951: 7). As it happens, the International Sociological Association has amended its statutes to provide for individual membership in the interests of democratizing and internationalizing the profession (as well as enlarging its sources of revenue) (Evan, 1975b). Clearly, there is sufficient variation among professional associations as regards unit of membership to warrant a study of its effects, for example, on loyalty to the association as well as loyalty to the profession.

Hypothesis 2: *Decentralized authority in multinational corporations and individual membership in international professional associations, as contrasted with centralized authority and collective membership, result in a denser*

network of interorganizational relationships and in a higher degree of organizational and occupational loyalty, thus contributing to a higher level of organizational, occupational, and normative integration of the international system.

The third structural variable deals with a mechanism for handling the interface problems of an organization. Some members of the staff of corporate and association headquarters specialize in functions pertaining to boundary relations of an organization, whereas others specialize in internal functions. This suggests that a ratio of boundary/nonboundary personnel could be constructed for both types of organizations to inquire into, for example, whether there is a positive relationship between this ratio and the size of the organizational network of a given organization (see Chapters 9 and 10).

Hypothesis 3: *The higher the ratio of boundary/nonboundary personnel in the headquarters of multinational corporations and international professional associations, the higher the level of coordination among affiliates and, in turn, the higher the level of organizational integration of the international system.*

The last structural variable is concerned with the degree of movement of headquarters staff between a parent organization and its affiliates. Do firms with a high rate of rotation of managerial and technical personnel from headquarters to affiliates evidence greater internal coordination of functions and more effective patterns of interaction with other organizations than firms having a low rate of rotation of such personnel? A comparable question might be asked in the case of professional associations, but in view of the nonhierarchical relationship between member organizations and international headquarters, it would be important to establish the rates of visits from both directions.

Hypothesis 4: *The higher the rate of movement of headquarters personnel from parent organization to affiliates, the greater the degree of coordination in multinational corporations and international professional associations and, in turn, the higher the level of organizational integration of the international system.*

The four structural variables briefly reviewed above would in all likelihood be related to the type of motivational orientation of the members of an organization. A structural pattern partaking of transnationalism (i.e., multinational ownership of the firm, with principal association officers and staff drawn from many nations; decentralized authority structure of the firm with individual membership in the association; high ratio of boundary/nonboundary personnel in headquarters staff; high rate of movement between headquarters staff of parent organization and affiliates) would engender a motivational orientation of transnationalism.

A "cosmopolitan" as opposed to a "local" orientation in the firm would mean either greater loyalty to the parent company or a dual loyalty to the parent company as well as its affiliate; similarly, it would mean a greater loyalty to the international association than to the national association of a dual loyalty. As regards the second motivational variable—attitude toward the legal status of the organization—a preference for incorporation under the auspices of an

international agency rather than a nation-state would reflect a transnational identification.

Hypothesis 5: *The higher the level of transnational orientation of the members of multinational corporations and international professional associations, the higher the level of normative, organizational, and occupational integration of the international system.*

Clearly, the four structural variables and the two motivational variables listed in Table 18.6 merely illustrate the range of organizational variables that could provide the basis for comparative research on the impact of these types of organizations on the level of economic, organizational, occupational, and normative integration of the international system. The hypotheses presented above indicate some of the relationships between the structural and motivational variables, on the one hand, and the integration variables, on the other, that are in need of systematic empirical testing.

CONCLUSION

Two types of transnational organizations—the multinational corporation and the international professional association—have thus far largely eluded the awareness of researchers in organization theory. This oversight need not continue, because both types provide strategic sites for coming to grips with two frontier problems in the field: (1) the analysis of interorganizational relations; and (2) the cross-cultural comparison of organizations.

The field of international relations has likewise not done justice to these types of organizations. Many scholars in this field evidently assume that these organizations, although operating in the interstices of nation-states, have little consequence for the future development of the international system (Judge, 1969: 143). In subscribing to this view, they may be overlooking the potential of these organizations for cumulatively and unanticipatedly transforming the international system. This conception of the international system is not unique to international relations specialists. Some futurologists, such as Kahn and Wiener (1967: 359–385), in their broad-gauged analysis of various possible structural modifications of the international system, likewise ignore such non-governmental international organizations as the multinational firm and the international professional association.

Yet the dynamism of the international system of the future may derive from a force for integration intimated in Durkheim's (1960: 27–28) famous preface to the second edition of *The Division of Labor in Society*, entitled, "Some Notes on Occupational Groups":

As advances are made in history, the organization which has territorial groups as its base steadily becomes effaced. . . . These geographical divisions are, for the most part, artificial and no longer awaken in us profound sentiments. The provincial spirit has disappeared never to return; the patriotism of the parish has become

an archaism that cannot be restored at will. . . . The State is too remote from individuals; its relations with them too external and intermittent to penetrate deeply into individual consciences and socialize them within. Where the State is the only environment in which men can live communal lives, they inevitably lose contact, become detached. . . . A nation can be maintained only if, between the State and the individual, there is intercalated a whole series of *secondary groups* near enough to the individuals to attract them strongly in their sphere of action and drag them, in this way, into the general torrent of social life. We have just shown how occupational groups are suited to fill this role, and that is their destiny.

Broadly conceived, the multinational corporation and the international professional association may be collectively performing the solidary functions at the international level that Durkheim envisioned for occupational groups within the nation. To those social scientists who discern an intellectual challenge in the study of these organizations, the task that lies ahead is at least fourfold:

1. Developing a model, akin to the nonlinear model of integration diagrammed in Figure 18.3, which copes with the complexity of the linkages among the components of the international system
2. Operationalizing various dimensions of integration of the international system, such as the four identified in the model presented in Figure 18.3
3. Designing an information system on various components of the international system—including multinational corporations and international professional associations—of the kind described and proposed by Judge (1971)
4. Providing for longitudinal data collection on (a) the various system linkages, such as those postulated in our nonlinear model of integration; and (b) the various dimensions of integration of the international system.

By studying the interaction patterns of these organizations to ascertain whether they are in fact creating networks of people transcending the nation-state and generating new levels of normative, economic, organizational, and occupational integration, social scientists can discover whether Durkheim's anticipations are valid for the international system.

PART VI

STAKEHOLDER MANAGEMENT



A Stakeholder Theory of the Modern Corporation

In Part VI, we focus our attention on a stakeholder theory of the firm, which we predict will become increasingly prominent in the 1990s (Freeman, 1984). Neoclassical economists, managerial economists, accountants, and many organizational researchers as well begin with the assumption that the principal goal of the corporation is to maximize returns to shareholders. Accordingly, the governance structure of the corporation, from the board of directors down to the level of first-line supervisors, reflect this basic assumption.

In Chapters 19–21, however, a different theory of the corporation is propounded, namely, that the principal goal of the corporation is to promote the interests and well-being of *all* stakeholders or constituents of the firm.¹ The rationale for this theory rests on organizational as well as ethical considerations. Organizationally, the firm is embedded in a web of cooperative relations with such stakeholders as suppliers, creditors, customers, employees, and various community organizations. Unless these relationships are protected, the performance of the firm cannot be assured, let alone enhanced. Ethically, the expectations and needs of various stakeholders merit the attention and concern of the firm. Kant's (1949) ethical principles, associated with his famous formulation of the categorical imperative, warrant that corporate executives balance the interests of all stakeholders in allocating the slack resources of the corporation.

¹ Cf. Weiler (1988). In response to the hostile takeover effort by the American Telephone and Telegraph company of the NCR Corporation, Charles E. Exley, Jr., NCR's chairman, stated: "Our duty is to protect the interest of all shareholders and other stakeholders of NCR" (Shapiro, 1991: D21).

Corporations have ceased to be merely legal devices through which the private business transactions of individuals may be carried on. Though still much used for this purpose, the corporate form has acquired a larger significance. The corporation has, in fact, become both a method of property tenure and a means of organizing economic life. Grown to tremendous proportions, there may be said to have evolved a "corporate system"—which has attracted to itself a combination of attributes and powers, and has attained a degree of prominence entitling it to be dealt with as a major social institution. (Berle and Means, 1932: 1)²

Despite these prophetic words of Berle and Means, scholars and managers alike continue to hold sacred the view that managers bear a special relationship to the stockholders of the firm. Since stockholders own shares in the firm, they have certain rights and privileges, which must be granted to them by management as well as others. Since the greatest good of all results from the self-interested pursuit of business, managers must be free to respond quickly to market forces. Sanctions, in the form of "the law of corporations," and other protective mechanisms in the form of social custom, accepted management practice, myth, and ritual, serve to reinforce the assumption of the primacy of the stockholder.

The purpose of this chapter is to pose several challenges to this assumption from within the framework of managerial capitalism and to suggest the bare bones of an alternative theory: *a stakeholder theory of the modern corporation*. We do not seek the demise of the modern corporation, either intellectually or in fact. Rather, we seek its transformation. In the words of Neurath, we shall attempt to "rebuild the ship, plank by plank, while it remains afloat."³

Our thesis is that we can revitalize the concept of managerial capitalism by replacing the notion that managers have a duty to stockholders with the concept that managers bear a fiduciary relationship to stakeholders. Stakeholders are those groups who have a stake in or claim on the firm. Specifically, we include suppliers, customers, employees, stockholders, and the local community as well as management in its role as agent for these groups. We argue that the legal, economic, political, and moral challenges to the currently received theory of the firm as a nexus of contracts among the owners of the factors of production and customers require us to revise this concept along essentially Kantian lines. That is, each of these stakeholder groups has a right not to be treated as a means to some end, and therefore must participate in determining the future direction of the firm in which they have a stake.⁴

² For a reassessment of Berle and Means's argument after 50 years, see *Journal of Law and Economics* 26 (June 1983), especially Stigler and Friedland (1983); North (1983); and Means (1983).

³ This metaphor is attributed to Neurath by Quine (1960: 3). The point is that to keep the ship afloat during repairs, we must replace a plank with one that will do a better job. Our argument is that Kantian capitalism can so replace the current version of managerial capitalism.

⁴ Kant's (1949) notion of respect for persons held that each person has a right not to be treated as a means to an end. See Rawls (1971) for an eloquent modern interpretation.

The crux of our argument is that we must reconceptualize the firm around the following question: For whose benefit and at whose expense should the firm be managed? We shall set forth such a reconceptualization in the form of a *stakeholder theory of the firm*. Finally, we shall critically examine the stakeholder view and its implications for the future of the capitalist system.

THE ATTACK ON MANAGERIAL CAPITALISM

The Legal Argument

The law of corporations gives a relatively clear-cut answer to the question: In whose interest and for whose benefit should the modern corporation be governed? It says that the corporation should be run in the interests of the stockholders in the firm. Directors and other officers of the firm have a fiduciary obligation to stockholders in the sense that the "affairs of the corporation" must be conducted in the interests of the stockholders. And stockholders can theoretically bring suit against those directors and managers for doing otherwise. It says further that the corporation exists "in contemplation of the law," and has personality as a "legal person," limited liability for its actions, and immortality, as its existence transcends that of its members.⁵

The basic idea of managerial capitalism is that in return for controlling the firm, management vigorously pursues the interests of stockholders. Since the corporation is a legal person, existing in contemplation of the law, managers of the corporation are constrained by law. Until recently, however, there was no constraint at all. In this century, the law has evolved to effectively constrain the pursuit of stockholder interests at the expense of other claimants on the firm. It has, in effect, guaranteed that the claims of customers, suppliers, local communities, and employees are in general subordinated to the claims of stockholders.

Central to the managerial view of the firm is the belief that management can pursue market transactions with suppliers and customers in an unconstrained manner.⁶ The existence of marketplace forces will ensure that fair prices for goods will be taken. This supplier-firm-customer chain has been constrained by a number of legislative and judicial acts. The doctrine of "privity of contract," as articulated in *Winterbottom v. Wright* in 1842, has been eroded by the developments in products liability law. Indeed, *Greenman v. Yuba Power*, in 1963 gives the manufacturer strict liability for damage caused by its products, even though the seller has exercised all possible care in the preparation and sale of the product and the consumer has not bought the product from nor entered into

⁵ For an introduction to the law of corporations, see Conard (1976: Section 19); and Hamilton (1981: Chapter 8).

⁶ For a modern statement of managerial capitalism, see the literature in managerial economics, for example, Coase (1937); Jensen and Meckling (1976); and Williamson (1965b).

any contractual arrangement with the seller. Caveat emptor has been replaced, in large part, with caveat venditor (Charan and Freeman, 1980). The Consumer Product Safety Commission has the power to enact product recalls, and in 1980 one U.S. automobile company recalled more cars than it built. Some industries are required to provide information to customers about a product's ingredients, whether or not the customers want and are willing to pay for this information (Breyer, 1983: 133).

The supplier-firm-customer chain is far from that visualized by managerial capitalism. Firms, in their roles as customers and suppliers of other firms, have benefited from these constraints, and they have been harmed to the degree to which the constraints have meant loss of profit. However, we can say that management is not allowed to pursue the interests of stockholders at the expense of customers and suppliers.

The same argument is applicable to management's dealings with employees. The National Labor Relations Act of 1935 gave employees the right to unionize and to bargain in good faith. It set up the National Labor Relations Board to enforce these rights with management. The Equal Pay Act of 1963 and Title VII of the Civil Rights Act of 1964 constrain management from discrimination in hiring practices; these have been followed with the Age Discrimination in Employment Act of 1967 (Millstein and Katsh, 1981: Chapter 4). The emergence of a body of administrative case law arising from labor-management disputes and the historic settling of discrimination claims with large employers such as AT&T have caused the emergence of a body of practice in the corporation that is consistent with the legal guarantee of the rights of the employees. The law has protected the due process rights of those employees who enter into collective bargaining agreements with management. However, since only 30 percent of the labor force are participating in such agreements, this has prompted one labor law scholar to propose a statutory law prohibiting dismissals of the 70 percent of the work force not protected (Summers, 1980).

The law has also protected the interests of local communities. The Clean Air Act of 1970 and the Clean Water Act of 1970 have constrained management from "spoiling the commons." In a historic case, *Marsh v. Alabama* in 1946, the Supreme Court ruled that a company-owned town was subject to the provisions of the U.S. Constitution, thereby guaranteeing the rights of local citizens and negating the "property rights" of the firm. Some states and municipalities have gone further and passed laws preventing firms from moving plants or constraining when and how plants can be closed, and there is much current legal activity in this area to constrain management's pursuit of stockholders' interests at the expense of the local communities in which the firm operates.

We have argued that the result of such changes in the legal system can be viewed as giving some rights to those groups that have a claim on the firm, for example, customers, suppliers, employees, local communities, stockholders, and management. It raises the question that is at the core of a theory of the firm: In whose interest and for whose benefit should the firm be managed? The

answer proposed by managerial capitalism is clearly “the stockholders,” and we have argued that the law has been progressively circumscribing this answer.

The Economic Argument

In its pure, ideological form, managerial capitalism seeks to maximize the interests of stockholders. In its perennial criticism of government regulation, management espouses the “invisible hand” doctrine. It contends that it creates the greatest good for the greatest number and that therefore government need not intervene. However, we know that externalities, moral hazards, and monopoly power exist in fact, whether or not they exist in theory. Further, some of the legal apparatus mentioned above has evolved to deal with just these issues.

The problem of the “tragedy of the commons,” or the free-rider problem, pervades the concept of public goods such as water and air. No one has an incentive to incur the cost of clean-up or nonpollution, since the marginal gain of one firm’s action is small. Every firm reasons this way, and the result is pollution of water and air. Since the industrial revolution, firms have sought to internalize the benefits and externalize the costs of their actions. The cost must be borne by all, through taxation and regulation; hence we have the emergence of the environmental regulations of the 1970s.

Similarly, moral hazards arise when the purchaser of a good or service can pass along the cost of that good or service. There is then no incentive to economize on the part of either the producer or the consumer, and there is excessive use of the resource involved. The institutionalized practice of third-party payment in health care is a prime example of this phenomenon.

Finally, we see the avoidance of competitive behavior on the part of firms, each seeking to monopolize a small portion of the market and not compete with one another. In a number of industries, oligopolies have emerged, and while there is questionable evidence that they are not the most efficient corporate form in some industries, their potential for abuse of market power has again led to regulation of managerial activity. In the classic case, AT&T, arguably one of the great technological and managerial achievements of the century, was broken up into eight separate companies to prevent its abuse of monopoly power.

Externalities, moral hazards, and monopoly power have led to more external control on managerial capitalism. Due to these economic facts of life, there are de facto constraints on the ability of management to act in the interests of stockholders.

A STAKEHOLDER THEORY OF THE FIRM

Foundations of a Theory

Arguments that question the legitimacy of the modern corporation based on excessive corporate power usually hold that the corporation has no right to rule

for its constituents. Each person has the right to be treated not as a means to some corporate end but as an end in itself. If the modern corporation insists on treating others as means to an end, then at minimum they must agree to and hence participate (or choose not to participate) in the decisions to be used as such. If our theory does not require an understanding of the rights of those parties affected by the corporation, then it will run afoul of our judgments about rights. Thus, property rights are not absolute, especially when they conflict with important rights of others. The right to property does not yield the right to treat others as means to an end. Property rights are not a license to ignore Kant's principle of respect for persons. Any theory of the modern corporation that is consistent with our considered moral judgments must recognize that property rights are not absolute.

Arguments that question the legitimacy of the modern corporation based on externalities or harm usually hold that the corporation is accountable for the consequences of its actions. Persons are responsible for the consequences of their actions through the corporation, even if those actions are mediated. Any theory that seeks to justify the corporate form must be based partially on the idea that the corporation and its managers as moral agents can be the cause of and held accountable for the consequences of their actions.

In line with these two themes of rights and effects, we suggest two principles that will serve as working rules, not absolutes, to guide us in addressing some of the foundational issues. We will not settle the thorny issues that these principles raise, but merely argue that any theory, including the stakeholder theory, must be consistent with these principles.

Principle of Corporate Rights (PCR): *The corporation and its managers may not violate the legitimate rights of others to determine their own future.*

Principle of Corporate Effects (PCE): *The corporation and its managers are responsible for the effects of their actions on others.*

The Stakeholder Concept

Corporations have stakeholders, that is, groups and individuals who benefit from or are harmed by, and whose rights are violated or respected by, corporate actions. The notion of stakeholder is built around the Principle of Corporate Rights (PCR) and the Principle of Corporate Effects (PCE). The concept of stakeholders is a generalization of the notion of stockholders, who themselves have some special claim on the firm. Just as stockholders have a right to certain actions by management, so do other stakeholders have a right to their claim. The exact nature of these claims is a difficult question that we shall address, but the logic is identical to that of the stockholder theory. Stakes require action of a certain sort, and conflicting stakes require methods of resolution.

Freeman and Reed (1983) distinguish two senses of *stakeholder*. The “narrow definition” includes those groups who are vital to the survival and success of the corporation. The “wide definition” includes any group or individual who can affect or is affected by the corporation. While the wide definition is more in keeping with the PCE and the PCR, it raises too many difficult issues. We shall begin with a more modest aim: to articulate a stakeholder theory using the narrow definition.

Stakeholders in the Modern Corporation

Figure 19.1 depicts the stakeholders in a typical large corporation. The stakes of each are reciprocal, since each can affect the others in terms of harms and benefits as well as rights and duties. The stakes of each are not univocal and would vary by particular corporation. We merely set forth some general notions that seem to be common to many large firms.

Owners have some financial stake in the form of stocks, bonds, and so on, and expect some kind of financial return. Either they have given money directly to the firm, or they have some historical claim made through a series of morally justified exchanges. The firm affects their livelihood or, if a substantial portion of their retirement income is in stocks or bonds, their ability to care for themselves when they can no longer work. Of course, the stakes of owners will differ by type of owner, preferences for money, moral preferences, and so on, as well as by type of firm. The owners of AT&T are quite different from the owners of Ford Motor Company, with the stock of the former company being widely dispersed among 3 million stockholders and that of the latter being held by a small family group as well as a large group of public stockholders.

Employees have their jobs and usually their livelihood at stake; they often have specialized skills for which there is usually no perfectly elastic market. In

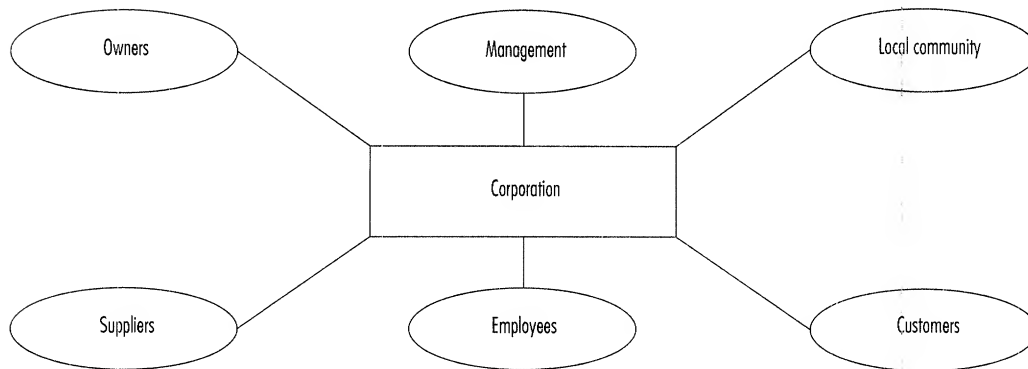


Figure 19.1 A stakeholder model of the corporation.

return for their labor, they expect some security, wages, benefits, and meaningful work. Where they are used as means to an end, they must participate in decisions affecting such use. In return for their loyalty, the corporation is expected to provide for them and carry them through difficult times. Employees are expected to follow the instructions of management most of the time, to speak favorably about the company, and to be responsible citizens in the local communities in which the company operates. The evidence that such policies and values as described here lead to productive company-employee relationships is compelling. It is equally compelling to realize that the opportunities for "bad faith" on the part of both management and employees are enormous. "Mock participation" in quality circles, singing the company song, and wearing the company uniform solely to please management, as well as management by authoritarian supervisors, all lead to distrust and unproductive work.

Suppliers, interpreted in a stakeholder sense, are vital to the success of the firm, for raw materials will determine the final product's quality and price. In turn, the firm is a customer of the supplier and is therefore vital to the success and survival of the supplier. When the firm treats the supplier as a valued member of the stakeholder network rather than simply as a source of materials, the supplier will respond when the firm is in need. For example, Chrysler traditionally had very close ties to its suppliers, even to the extent that led some to suspect the transfer of illegal payments. And when Chrysler was on the brink of disaster, the suppliers responded with price cuts, accepting late payments, financing, and so on. Supplier and company can rise and fall together. Of course, again, the particular supplier relationships will depend on a number of variables, such as the number of suppliers and whether the supplies are finished goods or raw materials.

Customers exchange resources for the products of the firm and in return receive the benefits of the products. Customers provide the lifeblood of the firm in the form of revenue. Given the level of reinvestment of earnings in large corporations, customers indirectly pay for the development of new products and services. Peters and Waterman (1982) have argued that being close to the customer leads to success with other stakeholders and that a distinguishing characteristic of some companies that have performed well is their emphasis on the customer. By paying attention to customers' needs, management automatically addresses the needs of suppliers and owners. Moreover, it seems that the ethic of customer service carries over to the community. Almost without fail, the "excellent companies" in Peters and Waterman's study have good reputations in the community. We would argue that Peters and Waterman have found multiple applications of Kant's dictum, "Treat persons as ends unto themselves," and it should come as no surprise that persons respond to such respectful treatment, be they customers, suppliers, owners, employees, or members of the local community. The real surprise is the novelty of the application of Kant's rule in a theory of good management practice.

The local community grants the firm the right to build facilities and benefits from the tax base and economic and social contributions of the firm. In return for the provision of local services, the firm is expected to be a good citizen, as is any person, either "natural or artificial." The firm cannot expose the community to unreasonable hazards in the form of pollution, toxic waste, and so on. If, for some reason, the firm must leave a community, it is expected to work with local leaders to make the transition as smooth as possible. Of course, the firm does not have perfect knowledge, but when it discovers some danger or runs afoul of new competition, it is expected to inform the local community and to work with it to overcome any problem. When the firm mismanages its relationship with the local community, it is in the same position as a citizen who commits a crime. It has violated its implicit social contract with the community and should expect to be distrusted and ostracized. It should not be surprised when punitive measures are invoked.

We have not included "competitors" as stakeholders in the narrow sense, since strictly speaking they are not necessary for the survival and success of the firm; the stakeholder theory works equally well in monopoly contexts. However, competitors and government would be the first to be included in an extension of this basic theory. It is simply not true that the interests of competitors in an industry are always in conflict. There is no reason why trade associations and other multiorganizational groups cannot band together to solve common problems that have little to do with how to restrain trade. Implementation of stakeholder management principles, in the long run, mitigates the need for industrial policy and an increasing role for government intervention and regulation.

The Role of Management

Management plays a special role, for it too has a stake in the fiction that is the modern corporation. On the one hand, management's stake is like that of employees, with some kind of explicit or implicit employment contract. But, on the other hand, management has a duty of safeguarding the welfare of the abstract entity that is the corporation, which can override a stake as employee. In short, management, especially top management, must look after the health of the corporation, and this involves balancing the multiple claims of conflicting stakeholders. Owners want more financial returns, while customers want more money spent on research and development. Employees want higher wages and better benefits, while the local community wants better parks and day-care facilities.

The task of management in today's corporation is akin to that of King Solomon. The stakeholder theory does not give primacy to one stakeholder group over another, although there will surely be times when one group will benefit at the expense of others. In general, however, management must keep the relationships among stakeholders in balance. When these relationships become unbalanced, the survival of the firm is in jeopardy.

When wages are too high and product quality is too low, customers leave, suppliers suffer, and owners sell their stocks and bonds, thus depressing the stock price and making it difficult to raise new capital at favorable rates. Note, however, that the reason for paying returns to owners is not that they “own” the firm, but that their support is necessary for the survival of the firm and that they have a legitimate claim on the firm. Similar reasoning applies in turn to each stakeholder group.

A stakeholder theory of the firm must redefine the purpose of the firm. The stockholder theory claims that the purpose of the firm is to maximize the welfare of the stockholders, perhaps subject to some moral or social constraints, either because such maximization leads to the greatest good or because of property rights. The purpose of the firm is quite different in our view. If a stakeholder theory is to be consistent with the principles of corporate effects and rights, then its purpose must take into account Kant’s dictum of respect for persons. The very purpose of the firm is, in our view, to serve as a vehicle for coordinating stakeholder interests. It is through the firm that each stakeholder group makes itself better off through voluntary exchanges. The corporation serves at the pleasure of its stakeholders, and none may be used as a means to the ends of another without full rights of participation in that decision. We can crystallize the particular applications of PCR and PCE to the stakeholder theory in two further principles. These stakeholder management principles will serve as a foundation for articulating the theory, and are guiding ideals for the immortal corporation as it endures through generations of particular mortal stakeholders.

Principle 1 (P1): *The corporation should be managed for the benefit of its stakeholders: its customers, suppliers, owners, employees, and local communities. The rights of these groups must be ensured, and, further, the groups must participate, in some sense, in decisions that substantially affect their welfare.*

Principle 2 (P2): *Management bears a fiduciary relationship to stakeholders and to the corporation as an abstract entity. It must act in the interests of the stakeholders as their agent, and it must act in the interests of the corporation to ensure the survival of the firm, safeguarding the long-term stakes of each group.*

P1, which we might call the Principle of Corporate Legitimacy, redefines the purpose of the firm to be in line with the principles of corporate effects and rights. It implies the legitimacy of stakeholder claims on the firm. Any social contract that justifies the existence of the corporate form includes the notion that stakeholders are a party to that contract. Further, stakeholders have some inalienable rights to participate in decisions that substantially affect their welfare or involve their being used as a means to another’s ends. We bring to bear our arguments for the incoherence of the stockholder view as justification for P1. If, in fact, there is no good reason for the stockholder theory, and if, in fact, there are harms, benefits, and rights of stakeholders involved in running the modern corporation, then we know of no other starting point for a theory of the corporation than P1.

P2, which we might call the Stakeholder Fiduciary Principle, explicitly defines the duty of management to recognize these claims (see Chapter 6). It will not always be possible to meet all claims of all stakeholders all the time, since some of these claims will conflict. Here P2 recognizes the duty of management to act in the best long-term interests of the corporation, conceived as a forum of stakeholder interaction, when the interests of the group outweigh the interests of the individual parties to the collective contract. The duty described in P2 is a fiduciary duty, yet it does not suffer from the difficulties surrounding the fiduciary duty to stockholders, for the conflicts involved there are precisely those that P2 makes it mandatory for management to resolve. Of course, P2 gives no instructions for a magical resolution of the conflicts that arise from *prima facie* obligations to multiple parties; but P2 does give these conflicts a legitimacy that they do not enjoy in the stockholder theory. It gives management a clear and distinct directive to pay attention to stakeholder claims.

P1 and P2 recognize the eventual need for changes in the law of corporations and other governance mechanisms if the stakeholder theory is to be put into practice. P1 and P2, if implemented as a major innovation in the structure of the corporation, will make manifest the eventual legal institutionalization of sanctions.

Structural Mechanisms

We propose several structural mechanisms to make a stakeholder management conception practicable. We shall offer a sketch of these here and say little by way of argument for them.

1. *The Stakeholder Board of Directors.* We propose that every corporation of a certain size yet to be determined, but surely all those that are publicly traded or are of the size of those publicly traded, form a board of directors composed of representatives of five stakeholder groups, including employees, customers, suppliers, stockholders, and members of the local community, as well as a representative of the corporation, whom we might call a "metaphysical director" since he or she would be responsible for the metaphysical entity that is "the corporation." Whether each representative has an equal voting right is a matter that can be decided by experimentation; issues of governance lend themselves naturally to both laboratory and organizational experiments (Evan, 1971).

These directors will be vested with the duty of care to manage the affairs of the corporation in concert with the interests of its stakeholders. Such a board would ensure that the rights of each group would have a forum, and by involving a director for the corporation, would ensure that the corporation itself would not be unduly harmed for the benefit of a particular group. In addition, by vesting each director with the duty of care for all stakeholders, we ensure that positive resolutions of conflicts would occur. Representatives of each stakeholder group would be elected from a "stakeholder assembly" that would initially meet to adopt working rules, charters, and so on, and whose sole purpose would be to elect and recall

representatives to corporate boards. The task of the metaphysical director, to be elected unanimously by the stakeholder representatives, is especially important. The fact that the director has no direct constituency would appear to enhance management control. However, nothing could be further from the truth. To represent the abstract entity that is the corporation would be a most demanding job. Our metaphysical director would be responsible for convincing both stakeholders and management that a certain course of action was in the interests of the long-term health of the corporation, especially when that action implies the sacrifice of the interests of all. The metaphysical director would be a key link between the stakeholder representatives and management, and would spearhead the drive to protect the norms of the interests of all stakeholders.

2. The Stakeholder Bill of Rights. Each stakeholder group would have the right to elect representatives, and to recall representatives to boards. Whether this is done on a corporation-by-corporation, an industry-by-industry, or a country-by-country basis is a matter for further discussion. Each stakeholder group would have the right to free speech, the right to grievance procedures inside the corporation and if necessary in the courts, the right to civil disobedience, and other basic political rights.

3. The Management Bill of Rights. Management would have the right to act on its fiduciary duty, as interpreted and constrained by the board and the courts, the right to safeguard innovation and research and development, and the right to free speech, grievance procedures, civil disobedience, and so on.

Both bills of rights merely recognize the fact that organizational life is pervasive in our society. If we are not to become what Orwell envisioned, then our organizations must guarantee those basic political freedoms, even at the cost of economic efficiency. If organizational members are to find meaningful work by participating actively in the modern corporation, then we must ensure that the principles of Jeffersonian democracy are safeguarded.

4. Corporate Law. The law of corporations needs to be redefined to recognize the legitimate purpose of the corporation as stated in P1. This has in fact developed in some areas of the law, such as products liability, where the claims of customers to safe products have emerged, and labor law, where the claims of employees have been safeguarded. Indeed, in such pioneering cases as *Marsh v. Alabama*, the courts have come close to a stakeholder perspective. We envision that a body of case law will emerge to give meaning to "the proper claims of stakeholders," and in effect that the "wisdom of Solomon" necessary to make the stakeholder theory work will emerge naturally through the joint action of the courts, stakeholders, and management.

CONCLUSION

While much of the above may seem utopian, there are some very practical transitional steps that could occur. Each large corporation could form a stakeholder advisory board, which would prepare a charter detailing how the organization is

to treat the claims of each stakeholder. Initially, this stakeholder advisory board would serve as an advisor to the current board of directors, and eventually it would replace that board. Simultaneously, a group of legal scholars and practitioners, such as the American Law Institute, could initiate discussion of the legal proposals and methods to change corporate charters, while business groups such as the Business Roundtable could examine the practical consequences of our proposals. Given the emergence of some consensus, we believe that a workable transition can be found.

Fiduciary Management

With the emergence of the modern corporation, much has been made of the phenomenon of the professionalization of management (Chandler, 1977). This concept means different things to different people. To legal scholars and economists, like Berle and Means (1932), who advance the thesis of the separation of ownership and control, it means that management has replaced entrepreneurs or owner-managers. To deans of business schools, professional management means the need to educate generations of future executives who have the necessary expertise to manage corporations, as evidenced by their acquisition of a bachelor's degree—and preferably a master's degree—of business administration. To Brandeis (1914), professional management refers to two attributes: (1) the acquisition of a body of technical knowledge; and (2) a commitment to an ethic of service.

As the twentieth century draws to a close, Brandeis' concept of an ethic of service is being translated to an ethic of trusteeship or fiduciary commitment to all stakeholders of the corporation and to the corporate entity itself. This trend is reflected in judicial decisions and legislative developments concerning directors' fiduciary duties. "In at least twenty-five states, statutes have been enacted which generally permit directors to consider the interests of constituencies other than shareholders when making decisions in the best interests of the corporation" (Wallman, 1990: 33).

In Chapter 20, the concept of fiduciary management is further elaborated (see Chapter 6). It involves a commitment to (1) the organizational objectives and ethical principles underlying the theory of stakeholder management; and (2) the protection of the interests of the corporate entity, as distinct from the interests of the several stakeholders of the corporation (see Chapter 19).

Notwithstanding the innovative functions of the modern corporation in the twentieth century, there is a growing awareness that it suffers from a serious organizational pathology. It allocates a disproportionate amount of its discretionary resources to stockholders, thereby depriving other constituents of their fair share of the proceeds of the corporation. Small wonder that questions have been repeatedly raised about the legitimacy of corporate power. In diagnosing some ailments of the corporation, I shall point to one course of therapy, namely, redesigning the corporation in accordance with the theory of stakeholder and fiduciary management.

THE BERLE AND MEANS THESIS

Ever since Berle and Means' classic study appeared in 1932 demonstrating the progressive separation of ownership and control in the corporation, various efforts have been made by social scientists and legal scholars to grapple with the problem of the legitimacy of corporate power (Berle and Means, 1932; Mason, 1960). In as much as the professional manager of the modern corporation owns a negligible proportion of the shares of stock of the corporation, the question arises: On behalf of whose interest do officers and directors of a corporation govern?

In a volume commemorating the twenty-fifth anniversary of the publication of Berle and Means's book, a number of divergent answers are proffered (Mason, 1960). The analyses of two of the contributors to this volume will be considered: Rostow and Chayes.

In a cogently argued essay, Rostow (1960: 51) contends that a corporation is not a democratic entity but rather an "endocratic" entity that operates in a competitive market environment in which it depends for its capital on inflows from investors. Hence, while granting the corporate legitimacy problem posed by Berle and Means, Rostow (1960: 69, 71) unequivocally reaffirms that officers and directors of a corporation are duty-bound to manage it on behalf of the interests of its stockholders:

The responsibility of corporate directors requires redefinition. It may give us a warm and comfortable feeling to say that the director is a trustee for the community, rather than for his stockholders; that he is a semi-public official, or a quasi-public official or some other kind of hyphenated public officer. It would be more constructive, however, to seek redefinition in another sense: to restate the law of corporate trusteeship in terms which take full account of the social advances of this century, but which direct the directors more sharply to concentrate their efforts on discharging their historic economic duties to their stockholders. . . .

A clear acceptance of profit maximization as a legal principle might well do something, perhaps a good deal, to order the pattern of corporate policy.

Thus, Rostow aligns himself with the proponents of the neoclassical theory of the firm.

Chayes (1960: 25–45), by contrast, handles the legitimacy issue by invoking the concept of the “rule of law.” As a creature of the state and of the legal order, the nineteenth century corporation was a “republic in miniature,” with the shareholders acting as the electorate, the directors serving as the legislature, and the officers performing the function of the executive. No judicial function was provided, since the state’s judiciary was available whenever necessary. With the rise of the modern corporation, especially in the twentieth century, this model no longer applies. The shareholder is no longer a risk-taking capitalist who exerts electoral control over the decision makers, but rather an investor who can readily sever his or her relationship with the corporation with the aid of the mechanism of the security markets. Hence, argues Chayes, shareholders scarcely need protection from the misuse of corporate power. This line of analysis leads Chayes to the conclusion that a more “spacious concept” of membership in the corporation is required for understanding corporate power. The identification of relevant constituencies, Chayes says, is a task that should be undertaken by the American legal system. As an indication of the direction of his thinking, he considers some arguments in favor of acknowledging employees and dealers as constituencies of the corporation. In short, Chayes contends that corporate power, in its multiple guises, needs to be controlled by the “rule of law.”

MANAGERIAL DISCRETION, THE AGENCY PROBLEM, AND THE LEGITIMACY OF CORPORATE POWER

In the late 1960s and 1970s, two approaches to the legitimacy problem of corporate power emerged, both influenced by the Berle and Means’s thesis of the separation of ownership and control. The first is a model of managerial discretion, principally articulated in the work of Williamson (1965b). Assuming that goals other than profit maximization are operative in corporate decision making, Williamson formulates several models of discretionary behavior of managers. Given the constraints of yielding a return on equity capital sufficient to motivate shareholders not to sell their shares of stock, managers operate with two categories of expense preference: “The first of these is the positive preference for staff. The second is the positive preference for emoluments—discretionary allocation of profit for salary and perquisites.” (Williamson, 1965: 55).

Possibly because these models do not sufficiently specify the limits of managerial discretion, an alternative frame of reference, known as “agency theory,” emerged (Ross, 1973; Jensen and Meckling, 1976; Fama and Jensen, 1983). Drawing on the law of agency, on the one hand, and the study of professional-client relations, on the other, agency theorists contend that:

1. Corporate managers are agents of stockholders, the principals of the corporation.
2. An agency relationship involves a contract whereby the principal delegates some decision-making authority to the agent with the provision that the agent act on the principal's behalf (Jensen and Meckling, 1976).
3. The interest of agents and principals can and do diverge when the agent acts in a self-serving manner, thus resulting in agency costs.
4. Agency costs can be reduced by various mechanisms, such as monitoring the behavior of agents and creating financial incentives for agents to maximize the wealth of principals.
5. If these mechanisms fail, the principals can fall back on the efficient capital market, where agency costs are reflected in a corporation's cost of equity.

In recent years, various social scientists, with the exception of Perrow (1986), have repeated these propositions of agency theory as though they were empirically confirmed. In actuality, they are analytically derived assertions designed to cope with the legitimacy problem arising from Berle and Means's thesis of the separation of ownership and control in the modern corporation.

THE STAKEHOLDER THEORY OF THE FIRM

The stakeholder theory, which is a quite different approach to the problem of corporate legitimacy, has been advocated by a number of social scientists for over three decades (Eells and Walton, 1961; Cyert and March, 1963; Ansoff, 1965; see Chapter 6 of this volume; Ackoff, 1981; Freeman, 1984). Instead of singling out the stockholder as the sole source of equity and as the sole beneficiary of corporate wealth, this theory holds that others also have a *stake* in the welfare of the corporation. Minimally, other stakeholders include employees, suppliers, customers, and the community in which the firm is located. In terms of Cyert and March's (1983) conceptualization, all stakeholders are members of an organization's coalition. From another vantage point, all groups or constituents who contribute to the wealth-creating process of the firm are stakeholders and hence are legitimate claimants on an organization's surplus resources.

One of the earliest articulations of this concept of the corporation dates back to an address made in the 1920s by Owen D. Young, then chief executive of General Electric Corporation (Dodd, 1932: 1154). He identified the following legitimate beneficiaries of the corporation: stockholders, customers, and the general public. Needless to say, Young's formulation did not result in the implementation of a new organizational design in General Electric Corporation.

Although his theory has a compelling ethical rationale, namely, that all wealth-creating contributors to the firm are legitimate beneficiaries, it poses a number of analytical and methodological paradoxes:

1. Assuming that the contributions of stakeholders to the wealth-producing process of the firm are not equal, how does one measure their relative contributions?
2. Similarly, if stakeholders differ in their power vis-à-vis the firm, that is, in their capacity to withhold or withdraw their contributions to the wealth-producing process of the firm, how does one measure their differential power?
3. Clearly, stakeholders have divergent and conflicting interests or utility functions; for example, stockholders want to maximize the return on their investments, whereas employees wish to maximize the return on their labor. How does one reconcile or balance the conflicting interests of stakeholders in allocating organizational slack?

The solution to the last question, proffered by Cyert and March (1963), is for the members of a coalition to bargain until they reach a "quasi-resolution" of their differences. This may be an accurate depiction of the way such conflicts are frequently handled. However, it offers neither an analytic solution nor an algorithm to assist the members of the corporate coalition in reaching an agreement.

Some of the above questions are being obliquely addressed with the aid of analytical procedures such as multiple attribute decision making (Zeleny, 1982) and the analytic hierarchy process (Saaty and Vargas, 1982). Empirical and experimental approaches are also required if the dilemmas of equilibrating inducements and contributions of stakeholders are to be solved.

At least three algorithms may be considered for allocating surplus resources of the corporation to stakeholders. The first is an egalitarian algorithm, in accordance with which each stakeholder would receive an equal share of organizational slack. This, however, presupposes an equality of stakeholder contributions about which there is rarely consensus in the real world. According to the second algorithm, which is nonegalitarian, stakeholders receive unequal proportions of organizational slack. Rather than arrive at a ranking of stakeholder contributions by theory, intuition, or fiat, an empirical approach that would survey all stakeholders of a firm could yield a set of mean weights.

Given that a substantial measure of dissensus among stakeholders could persist regardless of which type of nonegalitarian algorithm is employed, a third algorithm is conceivable that, in effect, is a combination of the first and second. According to this algorithm, a rotating or sequential procedure can be used whereby at different time periods stakeholders receive differing proportions of organizational slack. Thus, for example, if in one period shareholders receive the highest share of organizational slack, at a subsequent time they would receive the next highest, and at a later period, the lowest share.

In addition to attending to the array of analytical and empirical dilemmas of balancing the interest of stakeholders, there is yet another major challenge, namely, how to institutionalize the concept of the stakeholder in corporate law. Acknowledging the legal rights of claimants other than shareholders to the surplus resources of the corporation would entail a fundamental departure from the prevailing principles of corporate law. Just as in the nineteenth century, the foundational principles of corporate personality and limited liability were institutionalized in the interest of promoting the growth of free enterprise (Hurst, 1956, 1970), in the last decade of the twentieth century and the early decades of the twenty-first century, we may witness a struggle to accord legal rights to diverse stakeholders of the corporation in the interest of enhancing equity as well as efficiency. If such a transformation is to occur, a corollary change is required, namely, the enlargement of the legal concept of the fiduciary.

THE FIDUCIARY CONCEPT

The legal concept of a fiduciary imposes duties of loyalty and trust on the part of persons performing this role on behalf of beneficiaries. Derived from the law of agency (Seavey, 1964), the agent, unlike Adam Smith's rational economic man, is expected to forgo the pursuit of self-interest and act solely on behalf of the principal. The norm prescribing "other-regarding" as opposed to "self-regarding" behavior (Perrow, 1986) is already institutionalized in corporate law. Directors of public corporations have a fiduciary obligation to safeguard the interests of shareholders. Failure to do so exposes them to the threat of stockholder suits. The courts have on a number of occasions expressed their moral outrage at violations of fiduciary duties. Thus, for example, Cardozo, in *Meinhard v. Salmon* (249 N.Y. 458 (1928), at p. 464), articulated the norm to which a fiduciary is duty-bound as follows:

Many forms of conduct permissible in a workaday world for those acting at arm's length, are forbidden to those bound by fiduciary ties. A trustee is held to something stricter than the morals of the market place. Not honesty alone, but the punctilio of an honor the most sensitive, is then the standard of behavior. (Anderson, 1978: 746 n. 26)

From the vantage point of the stakeholder theory of the firm, the fiduciary obligation is in need of enlargement in two directions (see Chapter 6). First, there is a need to generalize the fiduciary duty from the shareholder to all stakeholders who contribute to the wealth-production of the enterprise. Such a revision of corporate law would understandably elicit vigorous resistance not only from shareholders but also from judges, legal scholars, and legislators wedded to the neoclassical theory of the firm. Second, there is a need for a norm

requiring the two most senior officers of a corporation, such as the chief executive officer and the chairman of the board of directors, to promote the welfare of the “corporate entity” itself. Such a norm represents an interest separate and distinct from the interests of the several stakeholders. This involves a distinction between parts and wholes that courts have not always acknowledged. Thus, in the federal appellate case of *Garner v. Wolfinbarger* (430 F.2d 1093 (1970)), the court, in a stockholder suit challenging management claims to attorney-client privileges, held that the phrase “corporate entity” is “conceptualistic” and not a useful tool of analysis. This decision overlooks the extensive legal scholarship on corporate personality (Maitland, 1911; Coleman, 1982), according to which the corporation is an “artificial person” that, unlike a “natural person,” can continue into perpetuity. Clearly, a fiduciary manager charged with the responsibility of promoting the corporate welfare as a whole differs from the fiduciary manager who is duty-bound to protect the interests of multiple stakeholders. Both types, however, differ fundamentally from the prevailing fiduciary obligations of corporate directors who are beholden to maximizing the interests of stockholders only.

FIDUCIARY MANAGEMENT IN ACTION: THE CHRYSLER CASE

Is the foregoing discussion simply a theoretical and speculative exercise, or are there empirical referents as well? One example will suffice: the strategy employed by Chrysler when it was threatened with bankruptcy in 1980.

In the address to the National Press Club in 1983, Lee Iacocca, Chairman of the Board of Directors of Chrysler, disclosed that the corporation was on the verge of repaying its \$1.2 billion loan to the federal government. In addition, he addressed the question of how Chrysler succeeded in surmounting the crises:

What is often forgotten is the \$2.2 billion that everybody else put up to keep the company together. And, of course, these are the union workers and the white collar workers who took pay cuts; the states that loaned us money; and the banks; and the suppliers; and the dealers. All the guys who really had something at stake. So, our whole program was based on equality of sacrifice, because everybody offered up something—something important.

Faced with the threat of bankruptcy, Iacocca pursued a strategy of persuading the principal stakeholders—exclusive of shareholders, interestingly enough—to make a sacrifice—by no means equal, as he states—to increase the chances that Chrysler would survive. Notwithstanding the conflicting interests of the stakeholders involved, Iacocca succeeded in eliciting their cooperation on behalf of the superordinate goal of corporate survival. In so doing, he was applying

the fiduciary concept not on behalf of a single stakeholder but on behalf of *all* relevant stakeholders collectively as well as on behalf of the “corporate entity” of Chrysler Corporation.

For the duration of the crisis, the principles of fiduciary management were applied by management in dealing with its principal stakeholders. However, as soon as the crisis ended, Chrysler evidently reverted to its traditional managerial practices. There is no evidence, for example, that the principles of fiduciary management were incorporated in the structure of the board of directors, in the structure of the divisions, and in the compensation policies of managerial and nonmanagerial employees. In short, although Iacocca brilliantly employed fiduciary management in coping with the crisis at hand, he did not use the opportunity to *institutionalize* the fiduciary management in the organizational structure and policy process of Chrysler Corporation.

CONCLUSION

Most corporations are unlikely to institutionalize the principles of fiduciary management voluntarily. Since the law, in general, and corporate law, in particular, change relatively slowly, without substantial pressures from external sources, the revision of corporate law in the direction of acknowledging the legitimate claims of stakeholders other than shareholders will not occur for some time. The conflicts surrounding the prolonged efforts of the American Law Institute (1986) to restate the principles of corporate governance and structure is a case in point. Nor is it likely that the concept of the fiduciary manager as the guardian of the “corporate entity” will be institutionalized in corporate law in the near future because of the probable resistance to such a legal innovation. In the interim, we can envision at least two sources of pressure for relevant innovation: the so-called excellent organization and the business school.

Because they occupy a secure niche in their markets, innovative corporations such as IBM, 3M, Du Pont, and Proctor and Gamble are less likely to be resistant to administrative innovations (Peters and Waterman, 1982). In all probability they also suffer from a lower level of “organizational lag,” that is, a discrepancy in the rate of technical and administrative innovations (see Chapters 7 and 8). Hence, the ideas of stakeholder management and fiduciary management discussed by academic researchers are likely to diffuse eventually to executives of such corporations.

In addition, the business school, by virtue of the fact that it provides a steady stream of tens of thousands of undergraduate business majors and MBAs every year, exerts an indirect influence on the “organizational culture” of the business enterprise. Admittedly, business schools, even the most prestigious, have been reluctant to introduce courses on business ethics and social responsibility as requirements for the MBA degree. And yet through such courses the concepts of stakeholder management and fiduciary management will be disseminated

to an ever-larger number of future managers of American industry. If such a development occurs, Brandeis' (1914) vision of the "professionalization of business" set forth early in this century may yet become fashionable in business schools and find its way on the agenda of corporate board meetings.

In short, the thesis of this chapter is that the modern corporation is suffering from a serious pathology in allocating its discretionary resources to stockholders. If, in the years ahead, progress is made in redesigning the corporation according to the principles of stakeholder and fiduciary management, it will significantly enhance the organizational health of the corporation.

Democratizing the Corporation

One of the assumptions of the theory of stakeholder management is that those who have a *stake* in the well-being of the corporation ought to have a corresponding *right* of representation. Otherwise put, the governance of the modern corporation, quite apart from concerns about wealth-creation, should be guided by democratic principles. On the face of it, the concept of corporate democracy seems like an utterly utopian notion. After all, the business of a corporation is business and not political representation. If democracy has any relevance whatsoever for the corporation, it presumably refers to “putting up candidates for the board or proposing matters to be voted upon by stockholders in proxies” (Herman, 1981).

In Chapter 21, this widespread assumption is questioned. Okun (1975) points up the incongruence between our political institutions, which are governed by a “domain of rights,” and our economic institutions, which are governed by a “domain of dollars.” If we are to eliminate this incongruity, experiments in corporate democracy are required.

At least one perceptive organizational researcher, Mintzberg (1983: 18–19), has acknowledged that “America ‘needs’ corporate democracy to reinforce the legitimacy of its most influential institutions, its giant corporations.” And yet, Mintzberg concludes, “America ‘cannot have’ corporate democracy, because it is fundamentally incompatible with the functioning of large mass production organizations.”

Ackoff (1989:11), on the other hand, who has been advocating a concept of the “circular organization” for many years, seeks to operationalize and implement organizational democracy.

"The essence of democracy is the absence of an ultimate authority, the circularity of power. It requires that anyone who has authority over others be subject to their collective authority. The circular organization preserves hierarchy but embeds it in a completely democratic organization."

With the aid of stakeholder management theory, the corporation can redesign its governance system, beginning with its board of directors, to take into account the legitimate rights of representation of each of the six stakeholders discussed in Chapter 19, namely, owners, suppliers, employees, management, customers, and the local community.

The British writer E. M. Forster (1947: 70), in a 1939 essay entitled "What I Believe," sets forth a novel view of democracy: "two cheers for democracy: one because it admits variety and two because it permits criticism. Two cheers are quite enough: There is no occasion to give three." Forster doesn't explain why he gives only two cheers for democracy, leaving the reader to conjecture that democracy lacks sufficient variety and criticism to satisfy his dedication to individualism. Nor does Forster refer anywhere in his essay to the role of the corporation in a capitalist democracy. If he had, my guess is that he would have given the corporation at most *one* cheer.

POLITICAL DEMOCRACY VERSUS ECONOMIC DEMOCRACY

To explain my surmise about Forster's view of the corporation, I turn now to the work of the distinguished economist Okun. In his book *Equality and Efficiency* Okun (1975) identifies an incongruence between the political and economic institutions of capitalist democracy. All citizens are guaranteed equal justice and equal political rights in what Okun calls the "domain of rights." On the other hand, economic institutions, which Okun refers to as the "domain of dollars," are based on voluntary exchanges in the marketplace and private ownership of productive assets. These institutional arrangements result in the unequal distribution of income and wealth. Although Okun presents a vigorous argument for the superior efficiency of the market economy as compared with any socialist, centrally planned economy, he is nevertheless troubled by the conflict between equality in the political realm and inequality in the economic realm. He claims that this conflict involves an unavoidable trade-off between equality and inefficiency. He sums up his thesis in the following provocative manner:

A democratic capitalist society will keep searching for better ways of drawing the boundary lines between the domain of rights and the domain of dollars. And it can make progress. To be sure, it will never solve the problem, for the conflict between equality and economic efficiency is inescapable. In that sense, capitalism and democracy are really a most improbable mixture. Maybe that is why they need each other—to put some rationality into equality and some humanity into efficiency. (Okun, 1975: 120)

Okun's conclusion constitutes a profound formulation of the dilemma facing capitalist democracy. Like Forster, he, too, in effect gives only two cheers for democracy.

When we now turn to the corporation itself as the dominant component of the economic institutions of democratic capitalism, the clash between the values of equality and efficiency, or between the "domain of rights" and the "domain of dollars," is quite pronounced. Corporate managers, as the legal representatives of stockholders, exercise overwhelming power over the entire range of decision making, namely, strategic planning, personnel, production, marketing, finance, and the like. Although the corporation is incorporated as a citizen of one of the 50 democratically governed states in the Union, its internal governance can scarcely be described as partaking of democracy. A more accurate description is that a corporation is a self-perpetuating oligarchy. Top executives and board members are carefully selected, and they, in turn, carefully select their successors. The idea of democratizing the governance of corporations, I suspect, would be dismissed out of hand by most executives as impractical, irrelevant, and even ridiculous for fear that it would jeopardize efficiency and interfere with their legal obligations to maximize the profits of stockholders.

STAKEHOLDER MANAGEMENT AND REDESIGNING THE CORPORATION

Yet, because the modern corporation has been the engine for industrialization as well as the stimulus for promoting social welfare, it does make sense to consider the question of whether the corporation can be redesigned as a democratic institution without impairing its efficiency as a wealth-creating institution. My answer to this question, in brief, is that the corporation can be democratized with the aid of a theory of stakeholder management. But before I explain what I have in mind, I would like to share an intriguing remark made to me by a Chinese social scientist during my visit to the People's Republic of China:

Americans have "big democracy," which we in China do not have. Americans can vote for their President. We can't vote for the Premier and the General Secretary

of the Party. That is big democracy, but big democracy occurs only every four years, or every two years when you vote for Congressmen. But we in China have “small democracy,” which American people do not have. In everyday life, Chinese people can participate in what happens to them on their jobs. My boss can’t fire me or refuse to give me a raise in salary. This is something that can only be done by the relevant collective or organizational unit. So we in China have small democracy, which Americans do not have because capitalism governs your enterprises. (Personal communication)

Without considering here the relative merits of China’s socialist democracy and America’s capitalist democracy, the Chinese social scientist has, in effect, raised a relevant question about the governance of the American corporation.

Existing provisions of corporate law as well as conventional wisdom dictate that corporate managers owe a responsibility only to stockholders. It is, however, the basic premise of the stakeholder theory of the firm that corporate managers also owe a responsibility to other constituencies that have a legitimate claim on the resources of the corporation. The philosophical rationale for this theory has been presented elsewhere (see Chapter 19). Here I shall focus on the political and pragmatic considerations.

The term “stakeholder,” which is derived by generalizing the position of stockholders, who have a stake in the firm by virtue of their ownership of stocks, bonds, and so on, to other constituencies, has been used to designate those constituencies that significantly affect or are significantly affected by the decisions and operations of the corporation. For present purposes, it is sufficient to identify six principal stakeholders, each of whom has a reciprocal relationship to the corporation: owners, employees, customers, suppliers, the local community, and management (see Figure 19.1.).

Let us consider, in turn, the stakes of each of these stakeholders. The stakes of owners require little elaboration. By purchasing equity in the firm, owners enable the firm to operate with sufficient capital and to undertake plans for expansion of operations. In return, the corporation pays owners a dividend sufficient to motivate them to continue their investment in the corporation.

Employees have long, and sometimes vociferously, staked out their claims on the resources of the corporation. By investing their labor, employees produce the products or services that the corporation sells in the marketplace. In return for their labor, employees expect wages, benefits, and job security. Without the loyalty and commitment of employees, the productive efficiency of the corporation would suffer. To retain their loyalty and commitment, management seeks to develop compensation systems and benefit programs to reward employees for their contribution to the firm.

Customers, who purchase the products or services of the corporation, are the lifeblood of the firm because they provide the revenue essential for its operations and growth. Unless the corporation convinces its customers of its determination to meet their needs and expectations as regards price and quality, the corporation will not succeed in retaining their loyalty to the corporation’s products or services.

Suppliers of raw materials or services to the corporation constitute yet another stakeholder. The supplier-corporation relationship is vital to the success of the firm. Suppliers can either enable the corporation to meet its contractual obligations or fail to do so, with the latter having dire consequences for the performance and reputation of the corporation. In turn, the corporation is a customer of the supplier and is therefore vital to the success and survival of the supplier. To the extent that the corporation adequately compensates suppliers for their faithful performance, suppliers will continue to contribute to the success of the corporation.

The local community in which the corporation establishes its facilities is yet another stakeholder. By providing the corporation with an infrastructure of transportation, communication, housing, and educational facilities for its employees and, occasionally, with tax concessions, the community renders substantial assistance to the corporation. In return for the provision of local services, the corporation is expected to be a good citizen. Among other things, this means that the firm cannot expose the community to unreasonable hazards in the form of air and water pollution or toxic wastes. And, if the firm, because of unforeseen economic developments, must close its plant, it should provide the leaders of the community with sufficient notice to make the transition as smooth as possible.

The sixth and final stakeholder is the management of the corporation. According to conventional wisdom, management is so closely identified with the interests of the owners that it is not normally thought of as a distinct stakeholder. And, given the separation of ownership and control in the modern corporation, one would be inclined to treat management as part of the employee stakeholder group. However, within the framework of the stakeholder theory of the firm, it is essential to conceive of management as a separate stakeholder. The following four stakeholder functions of management can be identified:

1. To safeguard the stakes of each of the other five stakeholders
2. To seek to balance the interests and claims of the other five stakeholders
3. To resolve disputes among stakeholders
4. To promote the well-being of the corporation itself

To discharge these unique and demanding tasks, management has to perform its functions as a fiduciary and in accordance with professional ethical standards. To articulate a new conception of the role of management, I have used the term "fiduciary management" (see Chapters 6 and 20). I would now like to comment on each of the four challenging tasks of fiduciary management.

Instead of performing its fiduciary obligations only to stockholders, management operating in a corporation committed to the stakeholder theory of the firm would extend its fiduciary obligations to each of the other five stakeholders as well. Admittedly, the interests and claims of the five stakeholders do come into

conflict with one another. For example, raising dividends leaves less profit after taxes for increases in wages and salaries for employees, for research and development to upgrade the quality of products for customers, for price adjustments for suppliers, and for improvements in the welfare of the community. Balancing stakeholders' conflicting claims is a daunting challenge of fiduciary management.

In the course of attempting to balance the conflicting claims of stakeholders, disputes will unavoidably arise. When they do, fiduciary management ought to ensure that the stakeholders involved—through their representatives—are accorded due process rights (see Chapter 6) in adjudicating their grievances at the level of the board of directors.

The fourth crucial task of fiduciary management is to protect and promote the long-term well-being of the corporation itself—or the “corporate person,” to use a legalism—as distinct from the five stakeholders. Unless fiduciary management attends to the long-term needs of the corporation by, for example, allocating sufficient resources to research and development, innovation, and growth, the future of the corporation may well be in jeopardy.

Clearly, these four tasks of fiduciary management are indeed challenging, and few executives are currently performing them well.

SOME PRINCIPLES OF CORPORATE DEMOCRACY

To return to the issue of democracy and the corporation, the underlying presupposition of stakeholder management theory is that each stakeholder should be accorded “organizational citizenship” rights (see Chapter 6). To effectuate stakeholder citizenship rights, a number of structural reforms in the corporation are required (see Chapter 19). First, the membership of the board of directors should represent each of the six principal stakeholders, which is quite different from the prevailing practice in selecting board members. Second, the marketing department should appoint special personnel to undertake a continuing dialogue with samples of customers to ensure that their needs and expectations are being met. Third, the personnel department should appoint personnel charged with organizing an “employee council” that represents all employees in the firm who are not performing a managerial function. This council would provide a channel for employees to communicate their needs, expectations, and grievances to top management. Fourth, a special department linking the functions of procurement, production, and law should organize a “supplier council” to ensure that suppliers have fair contractual treatment, an adequate two-way channel of communication, and a grievance mechanism. Finally, a special department, attached to the office of the president or the chief executive officer, should maintain cooperative relations with the local community via the appointment of a “local community council” consisting of key officials and representatives of major social groups.

In addition, quite apart from the need for a fundamental revision of corporate law, there is a need to draw up a blueprint or charter for protecting the citizenship rights of each of the six stakeholders of the firm (see Chapter 19). This is, however, in large measure a subject for future systematic corporate experimentation rather than armchair theorizing (Evan, 1971). In designing such a system, democratic political institutions must be adapted to the demands of a business enterprise. As corporate executives experiment with alternative designs for building democracy into the decision-making structure of the corporation, they should bear in mind that a fundamental principle of democracy is the right to dissent. Conflicts will inevitably arise among all six stakeholders. When they do occur, each stakeholder group should be accorded the right to voice its claims and demands in the presence of the highest corporate tribunal, the board of directors.

Institutionalizing dissent in the context of a pluralistic political framework is the essence of democracy. This distinguishes it from any nondemocratic political system dominated by a single political party. As the internationally renowned sociologist Dahrendorf (1988) stated: "Democracy provides for continuing change without revolution. It has the capacity to adapt to environmental changes without traumatic ruptures." By using stakeholder management theory to build democratic institutions into its structure, the corporation will enhance its capacity, in the long-term, to cope with environmental uncertainties in domestic as well as global markets.

CONCLUSION

This skeletal outline of corporate democracy, based on stakeholder management principles, should be distinguished from concepts of socialism or communism advocated by representatives of the former Soviet Union, Eastern European socialist countries, and China. Recent economic reforms that provide for the introduction of some elements of capitalism in the Russian Federation and, particularly in China, are an admission of the failure of a system of state ownership of the means of production and a centrally planned economy—the foundational principles of a socialist economy. China's experiments, since 1979, with the decollectivization of agriculture and the introduction of some elements of a market economy—including joint ventures with capitalist enterprises—constitute evidence of the failure of the principles of a socialist economy. Perhaps the clearest acknowledgment of the shortcomings of socialism was recently articulated by Hu Sheng, president of the Chinese Academy of the Social Sciences:

China's views on capitalism have undergone drastic changes during the past decade. We have come to realize that capitalism represents a fairly developed social stage in the whole process of human civilization, which, to a large extent, is still promoting the development of productivity. . . . But since socialism is in its

primary stage at present, it has much to learn from the capitalist system, such as high work efficiency, large-scale production management skills and legal systems. (*China Daily*, May 7, 1988)

Yet another recent critique of China's socialism is even more telling:

State ownership, which has dominated China's economy over the past 30 years, has hindered not only the development of social productivity but also socialist democratic politics. Under state ownership, the country owns the means of production in the name of the whole society. This leads to a lack of direct ownership by members of the society in the means of production. So the system has lessened people's sense of being masters of their society. (*China Daily*, May 16, 1988)

These assertions represent an acknowledgment of the superiority of capitalist democracy relative to China's socialist democracy. By democratizing the corporation in accordance with the pluralistic theory of stakeholder management, capitalist democracy will be reinforced with a Jeffersonian grass-roots democratic foundation, so much so that critics—the likes of Forster, Okun, and others—may yet be moved to give democracy three cheers.

PART VII

ORGANIZATIONAL EFFECTIVENESS

Organization Theory and Organizational Effectiveness

In Part VII, we turn our attention to an imperative of all organizations—organizational effectiveness. In market economies, corporate organizations are concerned principally with the bottom line and hence use a variety of financial performance measures. Public-sector organizations and nonprofit organizations are also perforce concerned with the problem of organizational effectiveness in order to assure, respectively, annual budgetary allocations and the continuation of grants or contributions.

Notwithstanding the burgeoning of organizational research, relatively few studies have included organizational effectiveness as a dependent variable. One possible explanation for this glaring omission is the lack of consensus with regard to the meaning and measurement of this concept (Steers, 1975; Campbell, 1977). Thus, Hannan and Freeman (1977a) claim that organizational effectiveness is an engineering or applied concept and cannot be studied scientifically. On the other hand, Goodman and Pennings (1977b: 2) assert that “organizational effectiveness is not only a central theme in the practical sphere; it is a central theme in organizational theory as well.”

Various models of organizational effectiveness have been advanced, such as a goals model, a systems resource model, and a life-cycle development model (Cameron and Whetten, 1983). All of the models presuppose that the concept

of effectiveness is multidimensional and that it is possible to compare the effectiveness of different organizations. In the past decade or so, yet another model of organizational effectiveness has emerged. A number of researchers have argued that organizational effectiveness is inherently a *political* concept, by which is meant that its very definition and measurement depends on the interests of the different constituencies—internal and external—comprising an organization (Pennings and Goodman, 1977; Scott, 1977: 70–72; Connolly, Conlon, and Deutsch, 1980; Kanter and Brinkerhoff, 1981). This multiple constituency or multiple stakeholder perspective on organizational effectiveness is a significant development and will be the subject of Chapter 23.

In the present chapter, I formulate a systems-based model that, I contend, is generic or universal in character. In other words, this model is, in principle, applicable to all types of organizations. The four component processes of this model are (1) inputs; (2) transformations; (3) outputs; and (4) feedback effects. To appraise the effectiveness of an organization, one must measure its performance with respect to all four systemic processes as well as their interrelationships. Operationalizing the four processes yields nine organizational effectiveness ratios. And to explore the generality of the model, some illustrative indicators are presented for six types of organizations: business organizations, administrative agencies, hospitals, courts, prisons, and colleges and universities. (For an application of this model to an organizational study of hospitals, see Chapter 13.)

Notwithstanding the burgeoning literature in organization theory, the field still suffers from a dearth of propositions with predictive and explanatory power. One of the underlying causes of this state of affairs is the striking neglect—almost systematic—of the problem of conceptualizing and measuring organizational performance or organizational effectiveness. This is indeed ironic, since a formal organization is by definition deliberately created to achieve one or more specified objectives. To compound this irony, one of the basic models in the field—Weber's (1947a: 337) rational-legal bureaucracy—postulates that it is the most “efficient” form of organization:

Experience tends universally to show that the purely bureaucratic type of *administrative* organization—that is, the monocratic variety of bureaucracy—is, from a *purely technical point of view*, capable of attaining the *highest degree of efficiency* and is in this sense formally the most rational known means of carrying out imperative control over human beings. It is superior to any other form in precision, in stability, in the stringency of its discipline, and in its reliability. It thus makes possible a particularly high *degree of calculability* of results for the heads of the

organization and for those acting in relation to it. It is finally superior both in intensive efficiency and in the scope of its operations, and is formally capable of application to all kinds of administrative tasks.

And yet, virtually no effort has thus far been expended to test this proposition.

Nor has Barnard's (1938) distinction between organizational effectiveness and organizational efficiency been the basis for any new conceptual developments. In his concern with formulating a general theory of formal organizations, Barnard conceived of an organization as a "cooperative system." His definition of organizational effectiveness is couched in terms of the process of cooperation:

What we mean by "effectiveness" of cooperation is the accomplishment of the recognized objectives of cooperative action. The degree of accomplishment indicates the degree of effectiveness. (Barnard, 1938: 55)

Departing from the common usage of the term in industry, engineering, and economics, Barnard (1938: 56–57, 92) defined organizational efficiency as follows:

The efficiency of a cooperative system is the resultant of the efficiencies of the individuals furnishing the constituent efforts, that is, as viewed by them. If the individual finds his motives being satisfied by what he does, he continues his cooperative effort; otherwise he does not. . . . The life of an organization depends upon its ability to secure and maintain the personal contributions of energy . . . necessary to effect its purposes.

In the decades since the classic works of Weber and Barnard appeared, there has been virtually no progress in refining the concept of organizational effectiveness. With the exception of Price's (1972b: 101–106; 1968) inventory of propositions and Ghorpade's (1971) compilation of readings, the problem of organizational effectiveness has not been the subject of systematic analysis. Instead, it has been used as an omnibus concept with a multiplicity of empirical referents, such as productivity, profitability, and morale.

The purpose of this chapter is to analyze the concept of organizational effectiveness in general terms applicable to all types of formal organizations. Underlying this analysis are two propositions: (1) current theoretical frameworks in the field of organization theory have had the unintended effect of diverting the attention of researchers from studying organizational effectiveness; and (2) sustained attention to this problem will redirect as well as stimulate the further development of organization theory.

AN ASSESSMENT OF SELECTED RESEARCH

Short of undertaking an inventory of the extensive research literature on organization theory, I shall consider several outstanding and instructive studies from the vantage point of the problem of organizational effectiveness. One of the most impressive programs of research on organizations, from a structural perspective, has been that of the Aston group (Pugh *et al.*, 1963; 1969, 1968; Inkson, Pugh, and Hickson, 1970; Hinings and Lee, 1971; Pheysey, Payne, and Pugh, 1971). Starting with a structural concept of organizations, which is a variant of Weber's model, they have studied the interrelationships of structural dimensions in a sample of 52 organizations in Britain. Among the structural variables examined are functional specialization, role specialization, standardization, formalization, centralization, and configuration. Conspicuously omitted from the original inquiry is any concern with differential organizational performance. Subsequently, members of the Aston group have considered such facets of organizational performance as reputation, productivity, profitability, adaptability, and morale (Pugh *et al.*, 1969; Pugh and Pheysey, 1973). In their ongoing research, several members of the Aston group are seeking to come to grips with this obvious oversight (Child, 1972; Pugh and Pheysey, 1973).

Another outstanding structural study is that by Blau and Schoenherr (1971). In examining 53 employment security agencies, they analyze the interrelationships of various organizational variables, such as size, complexity, decentralization, and administrative overhead. They also include four measures of "service" or "agency output," although they admit that their

concern is with the structure of employment security agencies, not with how well they perform, but it is nevertheless of great interest to determine how various aspects of the structure affect operations and the services supplied to clients. (Blau and Schoenherr, 1971: 19)

As a consequence of their orientation, Blau and Schoenherr do not, in the course of their various regression analyses, emerge with any overall propositions as to the factors accounting for the differential effectiveness of the 53 employment security agencies. In fact, in formulating a theory of the formal structure of organizations that summarizes their empirical findings, the variables of "service," "agency output," or "organizational effectiveness" do not even appear in any of their propositions (Blau and Schoenherr, 1971: 297-339).

A quite different type of structural approach to organizations is based on the microeconomic theory of the firm and Chandler's (1962) comparative study of corporations rather than on sociological theory. It is explicitly focused on explaining differences in organizational performance. In his analysis of corporations, Williamson (1970) distinguishes between two types of organizational structure: the multidivisional structure of M-form and the unitary, functional

structure of *U*-form. He argues in favor of the hypothesis that corporations with an *M*-form structure—primarily organizations that are large and complex—are economically more effective than those with a *U*-form structure.

A study by Negandhi and Reimann (1973) of 30 manufacturing firms in India inquired into the relationship between decentralization and organizational effectiveness. They found a positive relationship between the two based on behavioral as well as economic criteria. If we can assume that there is a strong relationship between decentralization and divisionalization of organization structure, this finding may be interpreted as supporting Williamson's hypothesis.

The contingency theory of Lawrence and Lorsch (1967) is explicitly concerned with differential organizational effectiveness. In their comparative study of a small number of firms in the plastics, foods, and containers industries, they found a relationship between organizational performance, organizational structure, and type of environment: Organizational effectiveness is a function of the "goodness of fit" between organizational structure and the type of environment. Negandhi and Reimann (1972: 141) tested Lawrence and Lorsch's proposition in India by studying the "impact of decentralization on organizational effectiveness of the firm under differing market conditions." They concluded that

the contingency theory appeared to be essentially valid in the environmental context of a developing country. . . . We cannot say that organization effectiveness requires decentralization under dynamic or competitive market conditions and centralization under stable, non-competitive conditions. Rather we would suggest that dynamic competitive market conditions make decentralization more important to organizational effectiveness than do stable non-competitive conditions. (Negandhi and Reimann, 1972: 144)

Hirsch (1975), in a recent comparative study of the phonographic records and pharmaceutical industries, accounts for the superior profitability of the former in terms of market structure, as well as associated legal and political institutional differences.

In contrast with research undertaken in a structural, microeconomic, or contingency framework are numerous studies of a psychological and social-psychological nature. Since the focus of inquiry is on individual, interpersonal, or group variables, it is not surprising that studies such as those by Haire, Ghiselli, and Porter (1966), Lawler and Porter (1967), and Vroom (1964) are not concerned with *organizational* effectiveness, although they are concerned with the differential effectiveness of *individual* managers.

In short, only a relatively modest number of organizational studies have focused on performance or effectiveness as a principal dependent variable. Some researchers omit this variable inadvertently and others do so advertently (Stinchcombe, 1974: 3–4). It is a reflection on the state of the art of this field that it

has thus far failed to grapple with such a fundamental variable as organizational effectiveness.

A SYSTEMS THEORY PERSPECTIVE

That theory and measurement are interrelated in science is a proposition so often reiterated that it is virtually an aphorism. Blalock (1968) and Lazarsfeld (1959), to mention only two social scientists, have dealt with this proposition on different occasions. In a sense, the foregoing discussion provides some supporting evidence for the validity of this proposition. The structural studies by Pugh and his colleagues (1963, 1969, 1968) and Blau and Schoenherr (1971), and the psychological and social-psychological studies by Haire, Ghiselli, and Porter (1966), Lawler and Porter (1967), and Vroom (1964), all have in common an *intraorganizational* orientation that tends to ignore questions of organizational effectiveness. By contrast, Hirsch (1975), Lawrence and Lorsch (1967), and Negandhi and Reimann (1972, 1973) are all concerned with interrelationships between organizational structure and environment, which prompts them to measure organizational effectiveness. In other words, as the focus of theoretical attention shifts from *internal* to *external* organizational variables, there is a greater likelihood that the researcher will include organizational effectiveness as a major variable. In turn, we anticipate that greater attention to organizational effectiveness will stimulate more theoretical concern with interorganizational relations.

A further impetus for attending to the variable of organizational effectiveness is the ongoing effort to develop a systems theory of organizations (Katz and Kahn, 1966; Miller, 1972; also see Chapters 9 and 10 in this volume). From a systems theory perspective, an organization is a social system that, in its interaction with its environment, activates at least four systemic processes:

1. *Inputs (I)* of various types of resources,
2. *Transformations (T)* of resources with the aid of social and/or technical mechanisms,
3. *Outputs (O)* that are transmitted to other systems, and
4. *Feedback effects (F)*, whether negative or positive.

To appraise the effectiveness of an organization with the aid of systems theory—one variant of which is the “organization-set model” (see Chapters 9 and 10)—one must measure its performance with respect to all four systemic processes as well as their interrelationships.

Organizational inputs consist of various types and quantities of resources, such as capital, people, information, and energy. To be sure, organizations dif-

fer greatly in their degree of success in mobilizing resources essential for their functioning. The factors accounting for differential success in obtaining organizational inputs may include such dimensions of the input organization-set as size, diversity, and structural configuration (see Chapter 10) and various dimensions of the culture (see Chapter 15) and social structure (see Chapter 16) of the organization's societal environment. In the case of business organizations, the market structure and associated legal and political institutions may significantly affect the flow of inputs to the focal organization (Hirsch, 1975).

The transformation process entails the application of social and physical technology to various organizational inputs. The effectiveness with which the focal organization processes inputs is partly a function of its organizational design, which, apart from the task technology, includes the authority structure, the division of labor, and the system of rewards (see Chapter 1). Organizations evidently differ considerably in the extent of their efforts to minimize the costs involved in transforming inputs into outputs.

Organizational outputs, whether in the form of products, services, decisions, or the like, are channeled to other organizations or to a population of individual consumers or clients. How effectively the outputs are channeled or marketed is partly a function of the various dimensions of the output organization-set, such as size, diversity, and structural configuration (see Chapter 10). In the case of the business firm, the product market in which the focal organization is operating transcends its output organization-set and may coincide with one or more industries. Clearly, the degree of concentration in the industry affects the success with which the focal organization can market its products.

With the disposition of organizational outputs, there are feedback effects to the organizational system that may be of a positive or a negative character. To the extent that an organizational system exhibits equilibrating properties, that is, tendencies to counteract or reduce deviations from "initial conditions," negative feedback is operating; on the other hand, a system that tends to amplify or reinforce deviations from "initial conditions" is one in which positive feedback is operating (Maruyama, 1968).

The systems concept of feedback takes on many disciplinary forms. Developed initially by engineers, on the one hand, and by biologists, on the other, it is characterized by a strong preoccupation with the system's capacity to achieve an equilibrium condition or maintain homeostasis—static or dynamic—in relation to predetermined initial conditions as set by those designing technology or as developed through the process of evolution. By contrast, when we are dealing with various types of social systems that are subject to planned changes or that are deliberately designed (such as organizations), initial conditions (in the sense of one or more goals) are not static. An organizational system does not strive to maintain an initial state; instead it may be conceived as seeking to maximize or minimize one or more values, whether they be profit, cost, influence, "adaptive capacity," or "adaptive upgrading" (Parsons, 1971: 11, 27; 1966: 22).

As a goal-setting, goal-seeking, and goal-changing type of social system, an organization is in the process of changing its initial conditions from one time period to the next. Therefore, it is not only concerned with *decreasing* deviations from a predetermined goal, namely, with *negative feedback* effects, but also with amplifying deviations in a favorable direction, namely, with *positive feedback* effects of a beneficent and self-enhancing nature as distinguished from the self-destructive and vicious circle variety (Rapoport, 1968: 7–8). If one conceives of an organization as engaging periodically in the process of goal formation that, in principle, can yield quantitative standards of performance, then it is concerned with minimizing or decreasing the degree of underattainment of its objectives. In this sense, it may be conceived as being concerned with *negative feedback* effects. However, to the extent that it also strives for the overattainment of its predetermined objectives from one period to the next, we may also attribute to an organizational system a preoccupation with *positive feedback* effects.

To be sure, in the case of any ongoing organization that is divided into various subunits and pursues multiple objectives simultaneously—each of which may vary in time horizon as well as in degree to which it entails formulating measurable standards of performance—*mixed feedback loops* are likely to occur. Some of these feedback loops are likely to be beneficial and some detrimental to the organization's well-being. A related source of variation in the types of feedback loops occurring in organizations is the degree to which they are *visible*. Since organizations differ considerably both in the number of goals and in the extent to which they *quantify* their goals, as well as in the frequency with which they monitor their performance, they are also likely to differ in the time delay of their responses to observed feedback loops. Thus, in business organizations and political parties, feedback effects are, on the whole, more measurable, more visible, and more quickly responded to than they are in nonprofit organizations such as government agencies, schools, colleges and universities, hospitals, and courts. A multinational corporation with subsidiaries located in dozens of countries around the world is concerned with collecting timely production and sales figures, on the basis of which it may make new decisions pertaining to staffing, production, marketing, investment and so on. Likewise, political parties generally assess their performance at the polls and—except for relatively small parties with social-movement orientations—make various adjustments in their programs and policies in order to enhance their chances of future electoral success.

Thus, in terms of the present formulation of organizational feedback, planned organizational changes in a desirable direction may be interpreted as involving *negative feedback* effects or positive feedback effects of a beneficial variety; organizational changes in an undesirable direction may be interpreted as involving positive feedback effects of a self-destructive nature. For example, a declining student enrollment in a college, an increasing wastage rate or absenteeism rate in a manufacturing firm, an increasing rate of recidivism among inmates discharged from a prison, a declining bed-occupancy rate in a hos-

pital, and an increasing backlog of cases in a court may all be viewed as indicators of positive feedback with negative organizational effects. On the other hand, an increasing student enrollment in a college, an increasing volume of sales in a business organization, an increasing patient recovery rate in a hospital, a declining rate of recidivism among inmates discharged from a prison, and a declining rate of administrative overhead in a government agency are all indicative of positive feedback with positive organizational effects.

From the perspective of a systems theory of organization, the four systemic processes outlined above suggest a new way of conceptualizing as well as operationalizing organizational effectiveness. As a multidimensional concept, organizational effectiveness may be defined as the capacity of an organization to cope with all four systemic processes relative to its goal-seeking behavior—however explicit or implicit this may be. Operationalizing these four processes in terms of systemic interrelations yields at least nine organizational effectiveness (OE) ratios:

- | | | |
|------------------|-------------------------|-------------------------|
| 1. $\frac{O}{I}$ | 4. $\frac{\Delta I}{I}$ | 7. $\frac{\Delta T}{I}$ |
| 2. $\frac{T}{I}$ | 5. $\frac{\Delta T}{T}$ | 8. $\frac{\Delta T}{O}$ |
| 3. $\frac{T}{O}$ | 6. $\frac{\Delta O}{O}$ | 9. $\frac{\Delta O}{I}$ |

All these OE ratios are, in principle, applicable to any type of organization. Ratios O/I , T/I , and T/O require only a single time slice in the systemic cycle of an organization; on the other hand, the feedback ratios $\Delta I/I$, $\Delta T/T$, $\Delta O/O$, $\Delta T/I$, $\Delta T/O$, and $\Delta O/I$ presuppose, by definition, at least two time slices.

It should be noted that not all nine OE ratios need be operationalized in any given study. It turns out that the most revered “black box” type of ratio, namely O/I , is mathematically deducible from T/I and T/O ; similarly, $\Delta O/I$ can be deduced from $\Delta T/I$ and $\Delta T/O$.

To explore the generality of our OE measures and the feasibility of operationalizing each of the four systemic processes for different types of organizations, Table 22.1 presents a set of *illustrative* indicators for six types of organizations: business organizations, administrative agencies, hospitals, courts, prisons, and colleges and universities. Which indicator or set of indicators is selected to measure a particular OE ratio depends, of course, on the type of organization and on the purposes and resources of the investigator.

It is noteworthy that it is possible to develop OE measures for different organizations, as well as for suborganizations, without *directly* and explicitly identifying their goal or goals but *indirectly* by measuring dimensions of inputs, transformations, and outputs of an organization. In effect, Gross’s (1965) “performance-structure” model setting forth seven organizational objectives suggests, for our purpose, the value of positing three *universal* organizational goals: input goals, transformation goals, and output goals. All organizations, although

Table 22.1 *Illustrative Indicators of Systemic Process Variables of Organizational Effectiveness for Different Types of Organizations*

Type of Organization	Some Systemic Process Variables			
	$\frac{O}{I}$	$\frac{T}{I}$	$\frac{T}{O}$	$\frac{\Delta I}{I}$
Business organizations	Return on investment	Inventory turnover: kilo-watts of energy per direct employees	R and D Volume of sales	Change in working capital
Administrative agencies (e.g. FTC)	Total number of cases processed and decided Annual budget	Cost of information system Annual budget	Cost of information system Total number of cases processed and decided	Change in workload; change in annual budget
Hospitals	Total number of patients treated Annual budget	Capital investment in medical technology Annual budget	Capital investment in medical technology Total number of patients treated	Change in number of patients treated
Courts	Total number of cases disposed and adjudicated Annual budget	Cost of information system Annual budget	Cost of information system Total number of cases disposed and adjudicated	Change in backlog of cases
Prisons	Number of inmates Annual budget	Cost of information system Annual budget	Cost of information system Number of inmates	Change in number of new inmates
Colleges and universities	Number of students graduated Annual budget	Cost of information system Annual budget	Cost of information system Number of students graduated	Change in students enrollment

Table 22.1 Illustrative Indicators of Systematic Process Variables of Organizational Effectiveness for Different Types of Organizations (Continued)

$\frac{\Delta T}{T}$	$\frac{\Delta O}{O}$	$\frac{\Delta T}{T}$	$\frac{\Delta T}{O}$	$\frac{\Delta O}{T}$
Change in administrative personnel to total personnel, A/P ; ^a change in labor unit cost; change in automation	Change in volume of sales; change in quality of products	Change in kilowatts of energy per direct employee	Change in R and D Volume of sales	Change in return on investment
Change in A/P ^a	Change in number of cases processed and decided	Change in cost of information system Annual budget	Change in cost of information system Total number of cases processed and decided	Change in rate of compliance with administrative regulations
Change in A/P	Change in patient recovery rate by type of cases	Change in capital investment in medical technology Annual budget	Change in capital investment in medical technology Total number of patients treated	Change in incidence of illness among discharged patients by type of case
Change in A/P	Change in number of cases decided	Change in cost of information system Annual budget	Change in cost of information system Total number of cases disposed and adjudicated	Change in number of cases decided Number of cases on calendar by type of case
Change in A/P	Change in number of discharged inmates	Change in cost of information system Annual budget	Change in cost of information system Number of inmate	Change in rate of recidivism among inmates
Change in A/P	Change in number of students graduated; change in number of publications of faculty	Change in cost of information system Annual budget	Change in cost of information system Number of students graduated	Change in rate of admission of students whose parents are alumni; change in rate of alumni contributions

^a Administrative personnel to production personnel

differing in degree of technical and administrative rationality, seek to minimize or maximize values associated with each of these three goals.

Unlike our systems-theoretic view of organizational effectiveness, the most common approach is in terms of goal achievement or the degree to which an organization attains its goals (Price, 1972b: 101). This poses a problem of identifying or postulating the goals, manifest and latent, of an organization. Price (1972b: 102), following Simon (1964: 21), resolves this problem by proposing to measure “the intentions and activities of the major decision-makers.” Others, however, may wish to measure the intentions and activities of other categories of organizational members, particularly rank-and-file members (or even in some instances, clients), whose conception of organizational goals and whose utility functions are likely to differ from those of “major decision-makers.”

Yuchtman and Seashore (1967) seek to avoid the goal approach to organizational effectiveness and argue in favor of a “resource” approach. They define “the effectiveness of an organization in terms of its bargaining position, as reflected in the ability of the organization, in either absolute or relative terms, to exploit its environment in the acquisition of scarce and valued resources” (Yuchtman and Seashore, 1967: 898). While there is much merit in emphasizing the crucial importance of resources—or, in our terms, of input processes and input goals—it ignores the other three systemic processes. On the other hand, the economist’s bias of measuring outputs in relation to inputs overlooks the other systemic processes that eventually affect the organization’s overall effectiveness. Clearly, the problems encountered in defining an organization’s goals can be avoided by indirectly deriving the goals—by positing the three generic goals of input, transformation, and output—with the aid of the foregoing OE ratios.

PROBLEMS OF MEASURING ORGANIZATIONAL EFFECTIVENESS

Theories of organization differ in their implications for the problem of measuring effectiveness. Thus, for example, a psychological or a social-psychological theory of organization, to the extent that it concerns itself with organizational effectiveness at all, tends to measure members’ perceptions of the effectiveness of an organization. Georgopoulos and Mann (1962) and Mott (1972) use this type of measurement approach in their study of hospitals and government agencies, respectively. Another factor that encourages researchers to rely on subjective measures of organizational effectiveness is the relative ease with which they can be constructed in contrast with the manifest difficulty of developing objective and unobtrusive measures (Webb *et al.*, 1966) of organizational effectiveness. Subjective measures also have the advantage that they can be applied to all types of organizations, be it a business organization, a government agency, a hospital, a court, or a university. On the other hand, there are serious problems of both reliability and validity with such measures. Unless subjective ratings

of organizational effectiveness are consistently and significantly associated with unobtrusive measures of an objective nature, there is little reason to accept them as either reliable or valid. Pennings' (1973) study interrelating objective and subjective measures of centralization and formalization dramatically highlights the absence of "convergent validity" of such measures of organizational structure. On the other hand, Lawrence and Lorsch (1967), in their study of organizations in the plastics industry, elicited from each chief executive a subjective evaluation of his organization's performance. They found that the subjective appraisals were highly correlated with their "total performance index," a composite score based on three measures: change in profits over the past five years; change in sales volume over the past five years; and new products introduced in the past five years as a percentage of current sales (Lawrence and Lorsch, 1967: 39-40).

Researchers skeptical of subjective measures of organizational effectiveness tend to fall back on standard economic measures of business ratios, such as those Dun and Bradstreet (1972; 1973a, b) and others (Troy, 1966; Robert Morris Associates, 1973). Such measures as earnings per share, return on investment, and profit as a percentage of sales emphasize output or the relation between input and output; however, they ignore transformation processes and feedback effects. The spurt of interest in corporate audits (Bauer and Fenn, 1972), social accounting (Churchill, 1974), and human resource accounting (Pyle, 1970; Flamholtz, 1974) may, in effect, represent a groping effort in the direction of designing new measures of input and transformation effectiveness of the corporation.

In lieu of a set of reliable and valid objective measures of organizational effectiveness based on a systems theory of organization, the strategy employed by Negandhi and Reimann (1973) is noteworthy: a combination of economic measures of effectiveness, such as growth in sales and net profits during the past, with behavioral science measures, such as turnover rates, absenteeism rates, employee morale, satisfaction in work, and utilization of high-level manpower. The principal drawback with this strategy is that it does not constitute a *general* measure of organizational effectiveness, nor is it theoretically grounded and applicable to the study of different types of organizations, particularly nonbusiness and nonprofit organizations. As Price (1972b: 102) puts it, "general measures of effectiveness are urgently needed." The nine OE ratios based on the four systems-theoretic processes advanced in this chapter and illustrated in Table 22.1 constitute a first approximation of a solution to the problem.

CONCLUSION

Much trial and error is needed in designing unobtrusive and nonreactive measures of organizational effectiveness based on alternative theories of organization. In addition, much exploratory research is needed to discover which organizational variables can predict which types of measures or dimensions of

organizational effectiveness. Until such time as these kinds of problems are solved, comparative organizational research (Heydebrand, 1973b), whether of a cross-organizational, cross-national, or cross-cultural variety (Evan, 1975a) will be seriously impeded. By undertaking comparative organizational studies, researchers can explore alternative measures of organizational effectiveness applicable to such diverse organizations as corporations, universities, churches, government agencies, and professional associations. Progress in developing *general* measures of organizational effectiveness will, in turn, contribute to the development of a *general* theory of organization applicable to all types of organizations. And general measures of organizational effectiveness, founded on a general theory of organization, will very likely generate a variety of ideas for organizational design and redesign.

Stakeholder Theory and Organizational Effectiveness

For several decades, a number of researchers in diverse fields—organization theory, management science, corporate strategy—have speculated about a new organizational paradigm: stakeholder management (Eells and Walton, 1961; Cyert and March, 1963; Ansoff, 1965; Ackoff, 1981; Freeman, 1984). Instead of beginning and ending with the assumption, prevalent in the fields of corporate law, microeconomics, finance theory, accounting, and organization theory, that the fundamental purpose of the corporation is to maximize returns to stockholders (Rappaport, 1986), an argument is made for allocating surplus resources to other stakeholders as well, namely, employees, customers, suppliers, and the local community residents.

Five corollary questions to this argument are addressed in Chapter 23. First, how does this theory relate to the movement for corporate social responsibility and business ethics? Second, assuming one wishes to implement the stakeholder theory, what structural innovations are required in the governance of the corporation (Freeman and Evan, 1990)? Third, what is the rationale for replacing the concept of a “social audit” with the concept of a “corporate stakeholder audit”? Fourth, what is the relationship between the concept of a corporate stakeholder audit and the problems of measuring organizational effectiveness? Fifth, what are the prospects for institutionalizing corporate stakeholder audits?

Since the 1950s, there has been much discussion about corporate social responsibility. Some of it is sheer public relations rhetoric concerned with improving the public image of the corporation, while some reflects a value commitment to reforming the policies of the corporation as they bear on society. The economist Milton Friedman (1970: 125), committed to a nineteenth-century laissez-faire approach to a market economy, has articulated a well-known “minimalist” position on the matter of corporate social responsibility, namely, apart from legal obligations and basic moral concerns common to all or most members of a society, the only and exclusive objective of the corporation should be to maximize shareholder value:

The doctrine of “social responsibility” taken seriously would extend the scope of the political mechanism to every human activity. It does not differ in philosophy from the most explicitly collectivist doctrine. It differs only by professing to believe that collectivist ends can be attained without collectivist means. That is why, in my book “Capitalism and Freedom,” I have called it a “fundamentally subversive doctrine” in a free society, and have said that in such a society, “there is one and only one social responsibility of business—to use its resources and engage in activities designed to increase its profits so long as it stays within the rules of the game, which is to say, engages in open and free competition without deception or fraud.”

Corporate executives, persuaded by Friedman’s minimalist position, may be inclined to overlook his admonition against “deception or fraud.” Thus, electrical industry executives were convicted for engaging in price-fixing and market segmentation conspiracies in violation of the Sherman Antitrust Act (Walton and Cleveland, 1964), and asbestos manufacturers, when faced with thousands of damage suits by employees who had succumbed to asbestosis, claimed ignorance of the health hazard of exposure to asbestos, notwithstanding several decades of published medical reports documenting the danger (Brodeur, 1985: 3–36).

In contrast to Friedman’s minimalist approach to corporate social responsibility, a “maximalist” position argues for a close linkage between business and society: the corporation, as a legal creation of the state, is both a social and an economic institution and hence should be responsible for its impact on the economic as well as other institutions of the enviroing society (Epstein, 1979). Epstein (1979: 1302), who has written extensively on the legal, political, and ethical aspects of corporate social responsibility, has advanced nine principles that he claims should guide the behavior of every firm:

1. *To produce socially useful goods or provide a needed service in as economically efficient a manner as is possible.*
 2. *To carry out this task lawfully and in a manner compatible with the ethical standards and democratic values of American society.*
-

3. *To do the above in a manner that best satisfies the material and psychological needs of the work force in terms of health, safety, dignity, opportunity for job satisfaction, organizational "due process," financial security, and career advancement.*
4. *To further the technology or "state of the art" within the industry.*
5. *To absorb the social costs ("externalities") attendant to its operations so that they become part of the "cost of doing business." These costs include safeguarding employees' industrial health and safety, and abating air, water, and noise pollution.*
6. *To be aware that the firm's operations affect individuals, groups, and communities in noneconomic ways.*
7. *To conform company interest with the evolving "national interest" and to further the national interest through its activities.*
8. *To achieve a rate of profit which will enable the enterprise to survive and grow, thereby assuring that the firm's economic task will be continued in the future, and that investors and creditors will receive financial returns adequate to generate future investment.*
9. *To work cooperatively with governmental and nongovernmental groups and institutions to bring about the realization of that elusive national goal, the "Good Society."*

Epstein has no illusion as to the degree of consensus with respect to his nine principles. He is, however, encouraged by the growth in the number of companies that have adopted codes of social responsibility (Epstein, 1979: 1302).

FROM CORPORATE SOCIAL RESPONSIBILITY TO STAKEHOLDER MANAGEMENT THEORY

In a subsequent analysis of the problems of corporate governance, Epstein (1987) reviews three related and overlapping approaches: business ethics, corporate social responsibility, and corporate social responsiveness. Business ethics, according to Epstein (1987: 370), deals with "systematic reflection, based upon generally recognized societal values, on the moral significance of the institution, policies and behavior of business actors in the normal course of their business activities." Corporate social responsibility, on the other hand, is

associated with efforts to evaluate the social performance of business and to provide managers with guidelines for action. The essence of the corporate social responsibility concept is the notion that business organizations have societal obligations that transcend economic functions of producing and distributing scarce goods and services and generating a satisfactory level of profits for their shareholders. (Epstein, 1987: 373)

Toward the end of the 1970s,

a move from corporate social responsibility to a newer, more strategically- and managerially-oriented concept, corporate social responsiveness, which stressed *how*

rather than whether corporations should both anticipate and respond to rapidly changing and escalating social expectations . . . “Responsiveness” emphasized anticipatory, “proactive” rather than primarily reactive behavior. (Epstein, 1987: 375–376)

These three approaches to the relations of business and society, however, have not helped resolve the ongoing controversies concerning the reform of corporate governance.

For the past decade, the American Law Institute (1982) has wrestled with the problem of articulating principles of corporate governance. In their 1984 draft of these principles, a modified traditional view of the corporation is presented:

A business corporation should have as its objective the conduct of business activities with a view to enhancing corporate profit and shareholder gain, except that, whether or not corporate profit and shareholder gain are thereby enhanced, the corporation, in the conduct of its business

- (a) *is obliged, to the same extent as a natural person, to act within the boundaries set by law,*
- (b) *may take into account ethical considerations that are reasonably regarded as appropriate to the responsible conduct of business, and*
- (c) *may devote a reasonable amount of resources to public welfare, humanitarian, educational, and philanthropic purposes. (American Law Institute, 1984: 25)*

Although these provisions go well beyond Friedman’s position on the corporation, they have been challenged by those who advocate that corporations should be managed in the interests of *all* constituencies or stakeholders and not only on behalf of shareholders. This view has found some measure of expression in the so-called corporate constituency statutes that have been passed by over half the state legislatures in response to the hostile corporate takeover battles in the 1980s (Wallman, 1990b, 1991). These statutes provide that corporate directors, in fulfilling their fiduciary obligations, must act in the best interest of the corporation and, in so doing, may consider the various constituencies of the corporation. Wallman, in arguing in favor of such statutes, states that they would encourage corporate directors to focus on long-term corporate strategy instead of being preoccupied with short-term goals. On the other hand, the Committee on Corporate Laws (1990: 2270–2271) of the American Bar Association takes a dim view of such corporate constituency statutes as “both unnecessary and unwise,” and states that they pose a threat to traditional corporate law and would require corporate directors to engage in a reallocation of wealth. In the course of its critique of the corporate constituency statutes, this Committee acknowledged, however, that

the proponents of other constituencies statutes correctly recognize that many groups in addition to shareholders have a continuing and important economic

stake in the welfare of corporations with which they have relationships. Often the shareholder's interest in the corporation is transitory, frequently a matter of days or weeks, while that of a manager or other employee may embrace a career and that of a community far longer. Similarly, a supplier may be almost wholly dependent upon one corporate customer for its economic viability, and a corporate customer may also have a measure of dependence upon its supplier. A community and its desirability as a corporate home and a residence for its citizens may depend upon one or a handful of corporations. A friendly or unfriendly change of control of a corporation can create severe hardships for many of these constituencies. (Committee on Corporate Laws, 1990: 2268)

In their ongoing debate on the governance of the modern corporation, corporate law scholars, business ethicists, and researchers concerned with corporate social responsibility and responsiveness are all, in effect, struggling with the issue of preserving or changing the dominant paradigm: the "economic model" of the corporation (Epstein, 1987: 362–363). Opposed to this model is a "political model," represented by the stakeholder theory of the firm. Drucker (1986) has trenchantly posed the problem in the following manner: "Can a modern democratic society tolerate the subordination of all other goals and priorities in a major institution, such as the publicly owned corporation, to short-term gain? And can it subordinate all other stakeholders to one constituency—the shareholder—even to a 'socially responsible' one?"

A stakeholder paradigm of the corporation would indeed require major changes in corporate law and, in turn, in corporate governance. Among the underlying principles of this paradigm are the following:

1. The corporation consists of multiple constituencies, or stakeholders, who have an interest in the well-being of the firm.
2. The concept of multiple constituencies is equivalent to the concept of multiple principals. Hence, the proposition that the corporation entails a principal-agent relationship—with the principal being the shareholders and the agent being the corporate officers and directors—is replaced with the proposition that the firm consists of multiple principals and multiple agents.
3. The concept of multiple agents, in turn, requires restructuring the governance of the corporation in accordance with the concept of the "constituency director," so that directors are elected to represent the interests of diverse constituencies.
4. Corporate directors, as agents of multiple constituencies, have fiduciary responsibilities to all constituencies. In other words, the single fiduciary relationship between management and stockholders is replaced with multiple fiduciary relationships on behalf of multiple constituencies.
5. To protect and promote the well-being of the abstract entity of the corporation as distinct from any of the constituencies, a special director,

whom we have called the “metaphysical” director (see Chapter 19), is essential.

6. The two principal functions of corporate officers are
 - (a) to resolve potential disputes among the various constituencies; and
 - (b) to balance the claims of multiple constituencies in the interest of safeguarding the well-being of the corporation itself.
7. It follows from the foregoing principles that the right to initiate a suit against corporate officers on grounds of mismanagement should not be confined to shareholders; other constituencies should be accorded this right as well. In other words, the concept of “stockholder-derivative suits” should be replaced with “stakeholder-derivative suits.”

Because this stakeholder paradigm involves a major paradigm shift, many organizational researchers, corporate law scholars, and business ethicists are not prepared to accept it (Hanks, 1991). Perhaps the most elaborate critique leveled against the stakeholder theory was recently formulated by the business ethicist Goodpaster (1991). His point of departure is the “legal constitution of the modern corporation,” and he argues that “in their role as managers, with a *fiduciary* relationship that binds them as agents *to principals*, their basic outlook subordinates other stakeholder concerns to those of stockholders” (Goodpaster, 1991: 58, 63). He goes one step further and invests the prevailing system of corporate governance with more substance:

It can be argued that multi-fiduciary stakeholder analysis is simply incompatible with widely-held moral convictions about the special fiduciary obligations owed by management to stockholders. At the center of the objection is the belief that the obligations of agents to principals are stronger or different in kind from those of agents to third parties. (Goodpaster, 1991: 63)

In addition, a “multifiduciary” stakeholder orientation, according to Goodpaster, poses a threat to the continuation of the private corporation:

The relationship between management and stockholders is *ethically* different in kind from the relationship between management and other parties (like employees, suppliers, customers, etc.), a fact that seems to go unnoticed by the multi-fiduciary approach. If it were not, the corporation would cease to be a private sector institution. (Goodpaster, 1991: 69)

Our response to Goodpaster’s critique, set forth in Chapter 19, is as follows:

We can revitalize the concept of managerial capitalism by replacing the notion that managers have a duty to stockholders with the concept that managers bear a fiduciary relationship to stakeholders. Stakeholders are those groups who have

a stake in or claim on the firm. Specifically, we include suppliers, customers, employees, stockholders, and the local community as well as management in its role as agent for these groups. We argue that the legal, economic, political, and moral challenges to the currently received theory of the firm as a nexus of contracts among the owners of the factors of production and customers require us to revise this concept along essentially Kantian lines. That is, each of these stakeholder groups has a right not to be treated as a means to some end, and therefore must participate in determining the future direction of the firm in which they have a stake. (page 336)

IMPLICATIONS FOR MEASURING ORGANIZATIONAL EFFECTIVENESS

The stakeholder theory of management has a direct bearing on the problem of measuring organizational effectiveness. Accepting the economic model of the corporation leads managers and organizational researchers alike to assume that the "bottom line" provides a necessary and sufficient measure of the effectiveness of a firm. This conception is also reinforced by the theory and research of an array of disciplines, including corporate finance, accounting, managerial economics, and the like.

Given the widespread assumption that there is but a single principal-agent relationship in the corporation, namely that between shareholders and top management, it follows that maximizing returns on investment and associated financial measures and ratios conventionally employed in financial statements (Abt, 1977: 49–50) constitute objective and valid measures of corporate performance. What is generally overlooked is that any assessment of the organizational effectiveness of a corporation presupposes a "social construction" of corporate reality (Berger and Luckmann, 1967). In other words, any measure of organizational effectiveness involves a normative judgment reflecting the interests of a particular corporate constituency (Scott, 1977: 70–71).

If we replace the economic model of the corporation with a political model—as exemplified by the stakeholder theory of the firm—then it follows that a multiple constituency perspective is required in measuring corporate effectiveness (Connolly, Conlon, and Deutsch, 1980). Each constituency seeks to maximize its rewards from the firm and to minimize its contributions to the firm (Pennings and Goodman, 1977: 167–168). Thus, for example, "customers will desire higher quality at lower cost, suppliers will wish to sell more dearly and wholesalers to buy more cheaply, workers will prefer higher wages and greater fringe benefits, and managers will seek higher profits and lower costs" (Scott, 1977: 71).

Implicit in the stakeholder theory of the firm is that the measurement of corporate effectiveness requires a multidimensional approach (Cameron and Whetten, 1983: 1–24). It also requires an assessment of the extent to which the interests of the major constituencies of a firm are being satisfied and an

assessment of the “corporate welfare function,” or the extent to which the corporate entity itself, as distinct from its several constituencies, is prospering. Since these measures vary over time, periodic assessments are required.

The idea of undertaking a nontraditional assessment of the performance of a corporation was first advanced in 1953 by Bowen in his book *Social Responsibilities of the Businessman*:

Another possible institutional change which might help to strengthen the social point of view in business management would be the social audit. Just as businesses subject themselves to audits of their accounts by independent public-accountant firms, they might also subject themselves to periodic examination by independent outside experts who would evaluate the performance of the business from the social point of view. (Bowen, 1953: 155)

In 1958, Blum undertook what he conceived as “the first actual implementation of the social-audit idea” (Blum, 1958: 77). Employees were asked to rate their satisfaction with their jobs, their pay rates, and the use of their talents; their overall attitude toward the company; their assessment of the competence of top management; and so on. From a stakeholder theory perspective, Blum conducted an assessment of the extent to which the interests of the employee constituency were being met by the corporation.

This study was followed by an exploration of the concept of a “corporate social audit” by Bauer and Fenn (1972). They considered a variety of topics to be included in a social audit, such as minority and female employment practices, protection of the environment, corporate giving, and the health and safety of employees. One of their conclusions is that although the social audit, as a social innovation, is still in an embryonic stage, it is an “indicator of a much larger phenomenon: the changing role of the corporation, with specific reference to the increased demands that it be more socially responsive” (Bauer and Fenn, 1972: 51).

Abt (1977), in turn, undertook a full-fledged inquiry into the methodological and substantive problems of conducting a corporate social audit, which he conceives as a type of “management information system, which is designed to help managers make decisions about operating policies” (Abt, 1977: 83–84). In order to measure the social performance of a corporation, Abt develops analogs to the financial statement, the financial account, and financial balance sheet. Thus, for example, “the social audit analog of ‘net profits to net sales’ would be ‘net social income on total social benefits’ since the total social benefits on the social income statement are analogous to sales or revenues on the financial statements” (Abt, 1977: 50). By applying benefit-cost analysis to corporate social impact, investments, and activities, the social audit, according to Abt (1977: 26), seeks to measure externalities that are not captured by standard financial audits. The ultimate aim is to integrate social audits with financial audits. “One major social effect of such a financially integrated social audit is therefore to decrease the apparent financial cost of the corporation’s social responsibility ac-

tivities, without reducing its short-term profitability and indeed in most cases actually increasing its long-term financial profitability" (Abt, 1977: 57).

Notwithstanding these laudable objectives, the rate of adoption of the corporate social audit has been very slow. This has prompted some researchers to inquire whether this innovation should evolve gradually by means of voluntary adoption, or whether it is time to mandate it by legislation or by the administrative decision of a regulatory agency (Dierkes and Antal, 1986).

FROM A SOCIAL AUDIT TO A CORPORATE STAKEHOLDER AUDIT

One of the assumptions underlying a social audit is that the corporation should monitor its externalities, especially those that are negative. Unless the corporation systematically seeks to reduce their incidence and makes an effort to terminate them, the law will eventually intervene. The rise of environmental law in the 1970s, in effect, converted one facet of the concept of corporate social responsibility or business ethics into a legal duty. Similarly, legislative and judicial developments in products liability further sought to provide a legal basis for corporate social responsibility (Epstein, 1980). Requiring tobacco companies to print on cigarette packages a warning label that smoking can cause lung cancer is an example of using law to impose a "duty of care" on the corporation. However, relying only on law to regulate the corporation as a means of ensuring socially responsible behavior is clearly not feasible for at least three reasons. First, there is frequently insufficient consensus to pass the necessary laws. Second, there is frequently inadequate value commitment on the part of officials to implement a law that is already on the books. Third, all too often knowledge of what new laws are needed is not available (Evan, 1990). For these reasons, it is necessary to rely on business ethics to complement law so as to ensure that corporations act in a socially responsible manner.

The stakeholder theory of the corporation provides an organizational framework for reconceptualizing the problems of corporate social responsibility and for promoting corporate social responsibility. In addition, it provides a justification for replacing a "social audit," which is much too ambitious and unfocused, with a "corporate stakeholder audit." With the latter, an estimate is made of the costs and benefits incurred by each of the major stakeholders of a given corporation for a given fiscal year. This type of audit will reveal to what extent one or another stakeholder is being favored at the expense of another. In other words, it will show if the costs and benefits of the various major stakeholders are balanced or unbalanced. If they are balanced, we would predict that this would reflect a long-term trend toward a high level of organizational effectiveness. To be sure, the process of balancing the interests of diverse stakeholders is a daunting effort requiring subtle bargaining. Some of the opposition to such a

policy can be minimized by explicating its underlying rationale: to promote the welfare of each of the stakeholders and thereby to enhance the welfare of the corporate entity.

Thus far, relatively few researchers have addressed the problem of the relationship between the stakeholder theory of the corporation and organizational effectiveness. In an early study, which does not use the concept of stakeholder or constituency but rather of "societal components upon which the organization is dependent," Friedlander and Pickle (1968) report the results of a study of 97 small business organizations with 4 to 40 employees. In each of these organizations, the authors obtained measures of satisfaction of the "needs" and "demands" of the five societal components (the community, government, customers, suppliers, and creditors) and two "internal subsystem components" (employees and owner). They found relatively few significant correlations among the measures of satisfaction of the various stakeholders. Without considering whether the findings are a function of organizational size, Friedlander and Pickle (1968: 302–303) conclude that

evidently, organizations find it difficult to fulfill simultaneously the variety of demands made upon them. Whether the organization can concurrently fulfill all or even a major share of the divergent demands made upon it is a provocative and hypothetical question.

In a more recent study, Chakravarthy (1986) compared stakeholder satisfaction, measured by reputation scores derived from *Fortune* magazine surveys, for five "excellent" companies and for four "nonexcellent" companies. He found consistently higher satisfaction (reputation scores) for all four stakeholders—customers, employees, host community, and stockholders—among the excellent companies as compared with the nonexcellent companies. One of his conclusions is as follows:

Maximizing stockholder wealth should not then be the sole guiding principle of "excellent" companies. A necessary condition for excellence is the continued cooperation of the firm's multiple stakeholders. Minimizing their dissatisfaction should be a concurrent objective of "excellent" companies. (Chakravarthy, 1986: 448)

In a related study, using the same *Fortune* magazine survey reports on stakeholder satisfaction of shareholders, employees, customers and host community, Preston and Sapienza (1990) addressed a number of significant issues. First, are the satisfaction ratings for each of the four stakeholders correlated with one another? Preston and Sapienza found that they are indeed significantly intercorrelated at the .01 level or better. Second, are the stakeholder ratings related to conventional performance measures, such as profitability, as measured by a 10-year total rate of return, and growth, as measured by the percentage increase in

sales over 5 years? The authors found significant correlatives between all stakeholder ratings and the 10-year rates of return. As for sales growth, Preston and Sapienza (1990: 370) observed that the "results suggest that successful pursuit of the interests of shareholders, employees, and customers are entirely consistent with sales growth; only community/environmental interests are not associated with growth in sales." Third, are the stakeholder ratings different for high growth and profitability firms as compared with low growth and profitability firms? The former companies, Preston and Sapienza (1990: 372) found, were consistently higher in all their stakeholder ratings than the latter companies, leading them to conclude that "multiple stakeholder objectives tend to be achieved, or not achieved, largely in combination with each other—and in combination with conventional financial objectives—rather than as trade-off alternatives."

The studies of Chakravarty and of Preston and Sapienza are noteworthy contributions because both are concerned with relating stakeholder ratings to conventional financial performance data. This approach addresses the compelling proposition that unless the firm solves the problem of growth and survival, it cannot satisfy the expectations of its major stakeholders. On the other hand, it can be argued with equal cogency that only by satisfying the expectations of its major stakeholders can a firm achieve growth and ensure survival. One of the most promising approaches to measuring organizational effectiveness from a stakeholder perspective is Halal's (1986) return-on-resources model (ROR), presented in Table 23.1. This model has the advantage of formulating an integrative approach by providing a measure of the interests of the major stakeholders as well as of the corporate entity. If, as we argued in Chapters 19 and 20, the top executives of the corporation have a fiduciary duty not only to all the stakeholders but also to the corporate entity itself, then it is important to measure to what extent the welfare of the corporation as an entity, independent of the several stakeholders, is being protected. This is one of the drawbacks of Halal's ROR model, where the interests of the "total corporation" is merely a summation of the individual stakeholder interests. If it is important to conceptualize the interest of the corporate entity independently of those of the various stakeholders, then other measures, such as "organizational slack" (Cyert and March, 1963) and growth, are required. Thus, by investing in R&D, for example, a firm may generate new products or processes that can yield benefits to the corporation. A cost-benefit analysis of the corporate innovation process would provide a measure of the extent to which top management is contributing to promoting the well-being of the corporate entity.

The strength of Halal's ROR model lies in that, in principle, it can be applied to any organization. Admittedly, obtaining measures of resources invested, benefits provided, and the costs incurred would be difficult, requiring interviews with samples of respondents from all relevant groups of stakeholders. What is more, only by applying such a model periodically can one assess whether the return-on-resources for each stakeholder group is improving or deteriorating and

Table 23.1 *The Return-on-Resources Model*

<i>Constituent Group</i>	<i>Resource Invested</i>	<i>Benefits Provided</i>	<i>Cost Incurred</i>	<i>Return on Resources</i>
Investors	Equity/Debt capital	Dividends/Interest; capital gains	Capital losses	Return on investment
Employees	Upbringing Education Training Health	Wages & fringe Training Job satisfaction	Disabilities Meals and travel Job dissatisfaction	Return on human resources
Customers	Purchase price Search costs	Utility (consumer surplus)	Product damages Depreciation Maintenance	Return on purchases
The public	Public assets	Taxes Contributions	Government services Environmental damage	Return on public assets
Associated firms	Assets of associated firms	Sales of associated firms	Expenses of associated firms	Return on associated assets
Total corporation	Total resources	Total benefits	Total costs	Overall return on resources

Source: Halal (1986: 221).

whether the overall return-on resources for the organization as a whole is improving or deteriorating. Halal (1986: 221) summarizes the unique features of his model in the following manner:

For each constituency, three prominent exchanges are specified: resources the group invests in its dealings with the firm, the benefits it realizes, and the costs it incurs. These "social" transactions are just as real as financial figures, but we simply have not considered them in this light before. By quantifying such factors, we extend the traditional method used to evaluate the firm's *financial* performance, vis-à-vis stockholders, to include its *social* performance for other groups. Summing these factors for the entire system then, the traditional corporate goal, "Return-on-Investment," becomes a general equivalent, "Return-on-Resources."

Because the ROR model provides a complete account of all corporate transactions, it offers a means of rising above the endless squabbling over social responsibility versus economic gain. For instance, by including both the costs incurred by each constituency as well as the benefits it receives, the model clarifies the rights and responsibilities of these groups rather than simply regarding social is-

sues in isolated moral or philanthropic terms. From this holistic view, the old profit-centered model can be seen to represent a special case in which the interest of only one group—stockholders—dominates the system. A larger role for business now becomes apparent whereby the firm's mission is to unite these diverse interests into a coalition that better serves all constituencies.

INSTITUTIONALIZING CORPORATE STAKEHOLDER AUDITS

What are the prospects for institutionalizing corporate stakeholder audits? They are not very promising, unless several developments occur. First, further legal reforms in the direction of acknowledging the corporate role of stakeholders other than shareholders are necessary. The corporate constituency statutes, passed in 26 states, is but a prelude to a possible trend in this direction (Wallman, 1990, 1992). Second, fundamental legal reforms of the governance structure of the corporation are essential. The prevailing system of electing directors, who are usually nominated by the chief executive officer and ratified by current directors, constitutes a major barrier to the implementation of corporate stakeholder audits (McSweeney, 1978: 19–26). What is required is a major transformation of the governance structure whereby each of the principal stakeholder groups has an opportunity to elect directors on the board of a given corporation that represent their interests (Freeman and Evan, 1990).

There is, of course, a precedent for the legal implementation of a corporate stakeholder audit. Corporations are now required to submit to various regulatory agencies reports pertaining to equal employment opportunity; environmental impact with respect to air, water, and solid waste; the occupational safety and health of employees; consumer product safety; accuracy of product labeling and advertisements, and the like.

Absent reforms in corporate law, other developments of an informal nature can also stimulate the eventual implementation of corporate stakeholder audits. Some of the large, prestigious, publicly held corporations, for example, Fortune 500 companies, can voluntarily adopt such an innovation. NCR's initiative in sponsoring the First International Symposium on Stakeholders in 1988 was a step in this direction (Weiler, 1988). Alternatively, the influential Business Roundtable, which consists of the CEOs of the 200 largest corporations, could endorse the concept of a corporate stakeholder audit. Other informal initiatives could include actions by so-called public interest and independent directors to join corporate audit committees and propose enlarging the scope of their activities to include the idea of a corporate stakeholder audit.

In short, voluntary efforts to institutionalize the corporate stakeholder audit are conceivable. If they occur, they could forestall potential pressures for mandatory audits modeled after, for example, the annual 10-K report, required by the Securities and Exchange Commission of publicly held corporations.

CONCLUSION

If corporations evolve in the direction of institutionalizing a corporate stakeholder audit, this would facilitate the eventual implementation of the stakeholder theory discussed in Chapters 19–21. In that event, we will witness a major transformation in the organizational design as well as in the “organizational culture” of the corporation, namely, from a focus on the interests and values of *stockholders* to a focus on the interests and values of *stakeholders*.

If this should happen, we predict that those corporations undergoing such a transformation will achieve a significant improvement in long-term economic performance (Kotter and Heskett, 1992).

Conclusion:

Implications for Organizational Design and Redesign

Even without the benefit of a futurologist's crystal ball, it is safe to predict that organization theory will continue to be a burgeoning field in the 21st century. The reasons for this are not hard to discern. The problems of designing and managing large, complex organizations in the private as well as in the public sector are baffling, pervasive, and urgent. Executives of organizations, large and small, are searching for new ideas to enhance organizational effectiveness; and the intellectual challenge of modeling diverse organizations is so considerable that it will continue to attract the interest of members of a variety of disciplines to this field.

Building a house of cards starts easily enough, just two cards leaning one against the other; but as the house grows and the cards totter and need support—soon it is the game that leads the player. So also in design, ideas collapse and have to be rebuilt; one thing suggests another, and the architect hurries to catch up.

Witold Rybczynski, 1989: 41

Organizational design and redesign are ubiquitous problems of organizations seeking to enhance their performance. How do organizations structure and restructure themselves? Organizational elites, who usually make such decisions, have a choice: they can fall back on conventional wisdom or rely, explicitly or implicitly, on theory as a guide. If they opt for conventional wisdom, they are likely to use organizational design templates, so to speak, that are currently employed in their industry, or “organizational population.” This type of choice has been characterized as “institutional isomorphism” (Meyer and Rowan, 1977; Meyer and Scott, 1983; DiMaggio and Powell, 1983). Typically, these designs are inspired by Weberian hierarchical principles or classical managerial principles, such as unity of command and span of control. Simon (1958: 20) has characterized classical managerial principles as “proverbs” rather than empirically verified propositions. To the extent that decision makers in such organizations attend to the complexities and turbulence of their environments, they are likely to have recourse to a nexus of contracts in an effort to cope with their problems.

On the other hand, decision makers who wish to be guided by one or another of the theories discussed in the Introduction, such as open systems theory, resource dependence theory, institutional theory, and transaction-cost

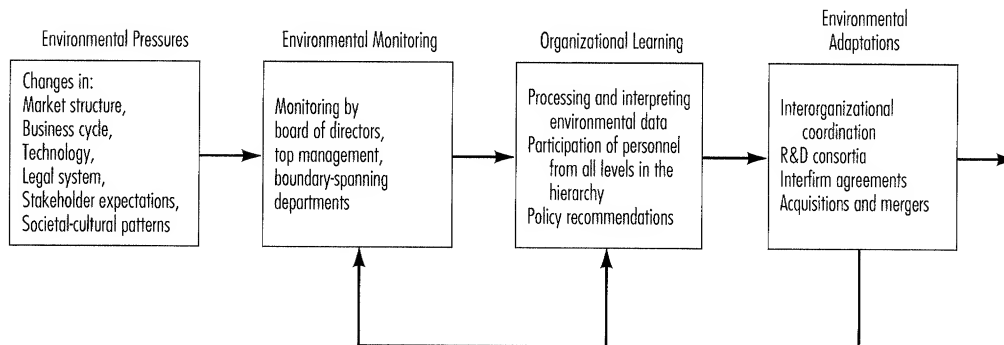


Figure C.1. A model of organizational design and redesign.

economics, will be alert to a variety of external and internal forces affecting organizational performance. This is not to deny that there are some creative professional managers who develop significant organizational innovations that also have the effect of influencing the growth of organization theory and research. A case in point is Alfred P. Sloan's invention of the concept of "multidivisional structure" (Chandler, 1962), which eventually stimulated Williamson (1975) to inquire into the factors associated with multidivisional versus unitary functional types or organizational structures.

Corporate organizations, as well as other types of organizations in the public and private sector, are continually buffeted by a variety of environmental forces. Those that succeed in responding creatively to external pressures learn to design and redesign their organizations. A model of this process is presented in Figure C.1.

ENVIRONMENTAL PRESSURES

A prerequisite for organizational adaptation and innovation is to comprehend the meaning and direction of the array of environmental forces impinging on the organization in question. There are at least six distinct types of environmental impingements: market-structure changes, business cycle changes, technological changes, legal system changes, changes in stakeholder expectations, and changes in societal-cultural patterns.

Changes in market structure, such as the entry of new competitors, can have a direct impact on the market share of the focal organization; assessing

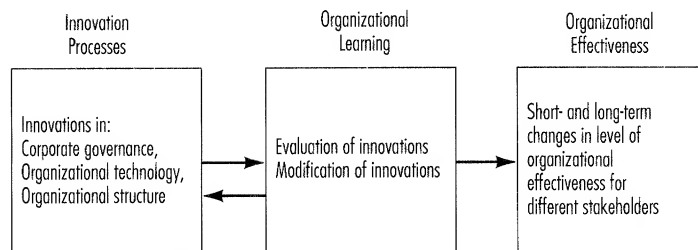


Figure C.1 (Continued)

the probability of and barriers to the entry of potential competitors is obviously of critical importance. In several industries, whether automotive, electronic, or semiconductor, there is mounting concern over the continuing loss of American competitiveness vis-à-vis Germany and Japan.

Changes in the business cycle, accompanied by a decline or an increase in demand for the products or services of the focal organization, will have significant effects on capital investment, staffing, and production schedules. Small and young business organizations are especially vulnerable to the effects of a recession. During a downturn in the economy, corporations tend to reduce investments in R&D, advertising, and other functions deemed dispensable from a short-term perspective.

Technological changes—especially technological revolutions—provide new challenges, threats, and opportunities. For example, the invention of the transistor and the later revolutionized electronics and a number of other industries. It also led to the extinction of firms whose technology was thereby made obsolete, such as those manufacturing vacuum tubes. Similarly, the computer revolution is continuing to transform various industries, from machine tools to telecommunications. Investing in the development of new technology requires the allocation of vast sums for R&D. Because of the risks and costs involved in R&D, industry—at least in the United States—has often relied on the federal government to take the initiative. A recent decline in the level of federal investment in R&D and the stagnant level of investment by United States industry may be interpreted as contributing to the further erosion of the international competitiveness of American industry (National Science Board, 1991).

Changes in legal system attributes and provisions—as, for example, the passage of new pollution control legislation or new immigration or export laws—can either facilitate or hamper the operations of business organizations. The laws of host countries in which multinational corporations operate can become increasingly restrictive or permissive with respect to pricing policy, labor practices, repatriation of profits, and the like. Deregulation of the airlines, for example, had a profound effect on the airline industry (Bailey, 1986). Likewise, the Bayh-Dole Patent Law of 1980 (Public Law 96-517), permitting universities and small businesses to obtain patents on inventions stemming from federally funded research, significantly changed the intellectual property rights of these types of organizations.

Similarly, changes in stakeholder expectations on the part of employees, suppliers, customers, or communities can initiate substantial changes in the governance of the corporation. Toward the end of the 1980s, approximately 26 states passed constituency statutes authorizing the boards of directors of corporations to consider the interests of stakeholders other than shareholders in their decision making. Several states, notably Indiana, Pennsylvania, and Connecticut, explicitly stated that directors are not required to give dominant effect to any particular constituency (Wallman, 1991; Hanks, 1991).

Finally, changes in societal-cultural patterns—for example, the increasing participation of women in the workforce and in various professions—are having

a substantial effect on the culture of corporations. Increasingly, women are being recruited for managerial positions, although opportunities for promotion to top managerial levels continue to be exceedingly limited (Kanter, 1977; Morrison, 1987). A much less visible cultural shift is a worldwide drive toward democratization in the post-communist era (Perlmutter, 1991: 913). How will this development affect the governance of corporations in the twenty-first century? Will it push the corporation toward democratizing its governance structure? Will some of the obstacles to democratizing the corporation discussed in Chapter 21 be surmounted?

ENVIRONMENTAL MONITORING

The foregoing types of environmental pressures, although objectively given, have to be integrated, perceived, “socially constructed,” and understood by the decision makers of the focal organization. This presupposes systematic, environmental monitoring by specialized boundary-spanning personnel strategically positioned to gather intelligence for the corporation (Wilensky, 1967; Adams, 1976; Kuhn, 1986). In Figure C.1, three categories of personnel engaged in environmental monitoring are identified: members of the board of directors, top management, and boundary-spanning departments such as marketing, procurement, law, and personnel.

Large multinational corporations have the resources to recruit highly specialized personnel, whether in engineering, finance, law, marketing, or the natural and social sciences, who are members of international professional networks. Membership in such networks sensitizes the corporations to the meaning of economic and technological developments before they become documented trends. Operating in multiple social and cultural contexts around the world, multinational corporations have an incentive to develop environmental monitoring strategies and facilities that are global in scope instead of national and ethnocentric (Perlmutter, 1969a; Keegan, 1974).

Investing in R&D is not normally associated with environmental monitoring. However, if it is true, as Cohen and Levinthal (1989: 569) have demonstrated, “that R&D not only generates new information but also enhances the firm’s ability to assimilate and exploit existing information,” then R&D can indeed perform an environmental monitoring function.

ORGANIZATIONAL LEARNING

The information that corporations glean from diverse sources and participants has to be integrated, analyzed, and adapted to corporate goals and strategies. This entails a process of “organizational learning,” or the analysis of bodies

of data in light of past, present, and future strategic choices of the corporation (March, 1991; Huber, 1991). The organizational learning process can be stimulated and accelerated by tapping the "human capital" at all levels in the organizational hierarchy. It also presupposes that organizational personnel avail themselves of relevant bodies of "organizational memory," which "in its most basic sense, . . . refers to stored information from an organization's history that can be brought to bear on present decisions" (Walsh and Ungson, 1991: 61). However, learning about a corporation's past policies and practices and assessing their utility may unavoidably lead to an *unlearning* process. In a major study of organizational learning, Argyris and Schön (1978: 29) make a useful distinction between "single-loop" and "double-loop" learning:

Organizational learning occurs when members of the organization act as learning agents for the organization, responding to changes in the internal and external environments of the organization by detecting and correcting errors. . . .

In organizational single-loop learning, the criterion for success is effectiveness. Individuals respond to error by modifying strategies and assumptions within constant organizational norms. In double-loop learning, response to detected error takes the form of joint inquiry into organizational norms themselves, so as to resolve their inconsistency and make the new norms more effectively realizable.

Frequently obstructing organizational learning are cultural assumptions associated with norms of the hierarchical structure of organizations, such as the fact that key decision makers are more knowledgeable about relevant facts, past and present, than lower-level participants. However, lower-level participants may be more receptive to unlearning past mistakes, especially if they are not penalized for acknowledging error; in addition, they are likely to be reluctant to confront upper-level participants with errors for which the latter may be responsible. When they do speak out—that is, become "whistleblowers" or "ethical resisters"—about corporate errors or corruption, they run the risk of management retaliation. One empirical study found that two-thirds of whistleblowers were dismissed (Glazer and Glazer, 89: 148). Those not dismissed are frequently demoted. A case in point involves two engineers employed by Morton Thiokol, Inc., whose O-rings failure was responsible for the tragic accident of the space shuttle Challenger:

Chairman Rogers: Do you have any reason, Mr. McDonald, to think that you were given another assignment because of the testimony you gave before the Commission?

Mr. McDonald: Yes, I do. I feel that I was set aside so that I would not have contact with the people from NASA again because they felt that I either couldn't work with them or it would be a situation that wouldn't be good for either party, and

so I was taken out of the failure analysis work that I was doing at Huntsville prior to that assignment.

Chairman Rogers: So, you were in effect punished for being right?

Mr. McDonald: I feel I was.

Chairman Rogers: Mr. Boisjoly, your assignment hasn't changed at all?

Mr. Boisjoly: In one respect yes, in one respect no. I have been designated as seal coordinator. I have been preparing a lot of information for input. But I too have been put on the sideline in that loop with relation to the customer.

Chairman Rogers: Do you feel that may be in retaliation for your testimony?

Mr. Boisjoly: I think that is a possibility, a distinct possibility. (Presidential Commission, 1986: 1585)

In short, because of the hierarchical structure of organizations, organizational learning is frequently impeded by the fear of acknowledging error, whether on the part of top management or rank-and-file employees. And yet, an organization's capacity for self-regulation does depend on its ability to pursue single-loop as well as double-loop learning. Assessing both past successes and failures is indispensable for developing new policy recommendations for coping with environmental uncertainty. Among the outputs of the organizational learning process are policy recommendations for environmental adaptations and innovations.

ENVIRONMENTAL ADAPTATIONS

Initiatives with respect to environmental adaptations entail changes in corporate strategy. Such changes can take a variety of forms, such as interorganizational coordination via trade associations, interfirm agreements to expedite the development of new knowledge and technologies, and acquisitions and mergers. Recourse to strategic alliances are observable among various types of organizations (Kanter, 1989; Green, Brupbacher, and Goldheim, 1991; Gibson and Smilor, 1992). In the burgeoning industry of biotechnology, for example, numerous interfirm agreements have been spawned to facilitate the acquisition of knowledge (Kogut, Shan, and Walker, 1990; Powell and Brantley, 1992). In the hospital field, affiliation agreements between medical school centers and teaching hospitals in a community is a source of learning for medical students, residents, and attending physicians; and in the semiconductor industry, R&D consortia have recently emerged to promote the development of knowledge. In other words, interorganizational strategies put a premium on forging new networks to enhance corporate performance (Powell, 1990). Small wonder that doubts have

recently been expressed concerning the validity of Williamson's (1975, 1988) theory of transaction-cost economics, which argues that organizations are governed by market versus hierarchical transactions. As Powell (1990: 229) has cogently stated, "by sticking to the twin pillars of markets and hierarchies, our attention is deflected from a diversity of organizational designs that are neither fish nor fowl, nor some mongrel hybrid, but a distinctly, different form."

Departing from customary modes of interfirm competition to develop cooperative organizational networks is especially difficult for corporations in the United States, which operate under a long-established framework of antitrust law. This is clearly not the case in Europe or Japan, where interorganizational cooperative agreements have long been widespread. However, with the passage of the National Cooperative Research Act in 1984 (Public Law 98-462), permitting U.S. corporations in the same industry to engage in joint R&D of a precompetitive nature, over 200 consortia have been founded (Gibson and Smilor, 1992: 255-267; see also Chapter 14 in this volume). Proposed amendments to this law to permit joint manufacturing activities by competitors as a means of enhancing American competitiveness have yet to be enacted by Congress. In the meantime, Congress has passed a number of laws facilitating the transfer of technology from federal laboratories to industrial firms: for example, the Federal Technology Transfer Act of 1986 (Public Law 99-502) and the National Competitiveness Technology Transfer Act of 1989 (Public Law 101-189). Both acts seek to strengthen the position of American corporations in the global economy.

Vertically integrated interorganizational strategic alliances of noncompetitive corporations—known as *keiretsu* in Japan (Gerlach, 1987, 1992)—pose a difficult challenge for American industry. Because of the threat of being found in violation of antitrust law, it is conceivable that some large corporations may already have created *informal* interfirm alliances performing functions analogous to that of the *keiretsu*, but which they do not publicize so as not to tip the hands of their competitors, let alone the Department of Justice.

Successful interorganizational partnerships tend to have, according to Kanter (1989: 173), six "Is" in place:

- The relationship is Important, and therefore it gets adequate resources, management attention, and sponsorship; there is no point in going to the trouble of a partnership unless it has strategic significance.
- There is an agreement for longer-term Investment, which tends to help equalize benefits over time.
- The partners are Interdependent, which helps keep power balanced.
- The organizations are Integrated so that the appropriate points of contact and communication are managed.
- Each is Informed about the plans and directions of the other.
- Finally, the partnership is Institutionalized—bolstered by a framework of supporting mechanisms, from legal requirements to social ties to shared values, all of which in fact make trust possible.

Clearly, as organizations increase their involvement in interorganizational networks, they commensurately enhance their ability to monitor their environment because they obtain access to new sources of information (Gerlach, 1987: 137). Such network participation facilitates and accelerates the process of organizational learning; hence the feedback loops shown in the model in Figure C.1.

INNOVATION PROCESSES AND ORGANIZATIONAL LEARNING

Internally, the adaptation process requires that the corporation initiate innovations of a structural nature. Among the key types of innovations are new organizational technologies, changes in corporate governance, and the introduction of a program of vertical, forward, and lateral integration (Useem, 1990). Introducing technological innovations stemming from in-house R&D efforts, however costly and complicated, is often perceived as unproblematic (Pisano, 1990). On the other hand, acquiring R&D innovations from external sources encounters resistance, if only because of the pervasive “not-invented-here” syndrome (Katz and Allen, 1982). Undertaking managerial or administrative innovations invariably involves many complexities, uncertainties, and resistances. This is surely the case when a corporation shifts from a unitary functional structure to a multidivisional structure, from a centralized structure to a decentralized structure, from a line organization to a matrix organization, from an organizational design with a tall hierarchy to one with a flat hierarchy, from a board of directors dominated by inside directors to one in which outside directors predominate, and so on. Hence, there are often understandable delays in implementing such innovations, thereby resulting in a discrepancy in the rates of technological and administrative innovations—a phenomenon conceptualized as “organizational lag” (see Chapters 7 and 8).

Regardless of the type of innovations introduced, it is essential to undertake an evaluation of the impact of innovations. This entails yet another process of organizational learning. Not infrequently, innovations produce unanticipated dysfunctions that, in turn, require subsequent innovations to undo the adverse effects of previous innovations; hence the reciprocal interaction, shown in Figure C.1, between innovation processes and organizational learning.

ORGANIZATIONAL EFFECTIVENESS

The organizational learning process extends to the last phase of the organizational design and redesign model, namely, assessing the short-term and long-term changes in organizational effectiveness for different stakeholders of the organization.

Corporations and nonbusiness organizations that exhibit a capacity to respond to environmental changes by utilizing novel external and internal resources are not only adaptive organizations but also innovative organizations. Such organizations, it is reasonable to predict, are high on various measures of organizational effectiveness, as defined by the interests of diverse stakeholders. Such organizations are likely to survive the increasing competitive pressures of a rapidly changing and globalizing economy as we approach the twenty-first century.

As pointed out in Chapter 23, it is simply not enough to use conventional financial measures of organizational effectiveness. Such measures may be politically useful from a short-term but not from a long-term perspective. Stakeholder demands—especially by nonshareholders—are likely to intrude themselves with increasing frequency and challenge the corporate status quo. In the long run, corporations that seek to meet the expectations of diverse stakeholders will promote their overall viability and effectiveness.

ORGANIZATIONAL DESIGN DECISIONS AS EXPERIMENTS

Organizational design and redesign decisions are a test of the vision and imagination of organizational leaders (Bennis and Nanus, 1985). They are tantamount to *hypotheses* that are being tested not in the laboratory but in the real world—often a risky and costly endeavor. Effective recourse to organizational memory, organizational learning, and computer simulation experiments can reduce but not eliminate the risks of such decisions. If such decisions are approached in an experimental spirit, which Campbell (1988) has long advocated, they can yield fruitful results from which an organization can learn valuable lessons. In point of fact, an innovative organization can be viewed as an “experimenting” organization that continually tests the validity of proposals for organizational redesign.¹

Organizational experimentation, in the laboratory and in the field, is a major strategy available to researchers in social science as well as to executives of various types of organizations for studying problems of organizational design and redesign. All formal organizations are recurrently confronted with dilemmas of organizational design. The researcher in organization theory, as in other scientific disciplines, can create various structures in the laboratory and learn why they have predictable or unpredictable results. . . . Likewise, if executives, regardless of type of organization, adopt what might be called a “cybernetic conception of decision making,”

¹ The concepts “innovative organization” and “experimenting organization” are analogous to Ackoff’s “idealized design”. According to Ackoff (1981: 149) “an idealized design of a system should consider how to structure a system to make it one that is ready, willing, and able to modify itself when necessary in order to make progress toward its ideals.”

namely, that managerial decisions are neither ineffable nor infallible but rather hypotheses to be tested in order to learn from both successes and failures, they will be more willing to entertain the idea of instituting a program of field experiments as an integral part of the operations of their organization. (Evan, 1971: 263)

As the field of organization theory evolves and matures, executives may be willing, in cooperation with organizational researchers, to undertake organizational redesign programs using the strategy of "organizational experimentation" (Evan, 1971), thereby testing the practical efficacy of a theory and simultaneously contributing data for the continuing evaluation of competing organizational theories.

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Author Index

- Abbott, W. M., 97
Abegglen, J. G., 32
Abt, C. C., 390, 391
Ackoff, R. L., 39, 74, 76, 141, 352,
359, 383, 406
Adam, G., 315
Adams, S. J., 401
Adler, N. J., 305
Aidenhoff, A., 267
Aiken, M., 10, 44, 120-122, 132,
308
Ajiferuke, M., 247
Aldrich, H. E., 18, 141, 208
Allen, T. J., 405
Allport, G. W., 253
Anderson, N., 310, 325
Anderson, R., 213
Angell, R. C., 311
Anonymous, 94, 315
Ansoff, H. I., 352, 383
Antal, A. B., 391
Anthos, A. G., 294, 303
Argyris, C., 142, 402
Armour, H. O., 123
Asch, S. E., 71
Ashby, W. R., 5-6
Ashmos, D. P., 8
Assael, H., 159
Azumi, K., 119

Bacharach, S. B., 120-122
Bailey, E. E., 400
Baker, F., 7
Baker, H., 33
Baldridge, J. V., 90, 120, 132

Barber, B., 30
Barley, S. R., 294
Barnard, C. I., 142, 272, 371
Barnes, J. A., 268
Barnet, R. J., 93
Barney, J. B., 9, 17, 303
Barrett, D., 228
Barron, J. N., 13
Bata, T., 329
Baty, G. B., viii, 308
Bauer, R. A., 267, 381, 390
Baum, J. A. C., 26
Bavelas, A., 41, 150
Bazin, G., 62
Becker, S. W., 120-121, 128, 213
Beckhard, R., 163
Behrman, J. N., 311, 316
Bell, D., 39
Bell, R., 171
Bendix, R., 69, 86
Bennis, W. G., 64, 142, 163, 288,
406
Berger, P. L., 389
Berkowitz, S. D., 259
Berle, A. A., Jr., 24-25, 73-74, 88,
93, 336, 349, 350
Berrien, F. K., 257
Bertalanffy, L. von, 2, 5, 141, 190
Biderman, A. D., 273
Bidwell, C. E., 22
Black, G., 120-121, 190
Blake, R. R., 163
Blalock, H. M., Jr., 374
Blau, P. M., 4, 35, 41, 78, 142, 171,
179-180, 184, 190, 210, 261,
270, 287, 372, 374

- Blauner, R., 43
Blowers, T. A., 180
Blum, F. H., 390
Boddewyn, J., 247, 269, 308
Boise, W. B., 121
Boissevain, J., 267
Bolton, M. K., 232
Bonini, C. P., 186
Bonner, R. E., 194
Botkins, J., 228
Bott, E. J., 267
Boudon, R., 264, 267
Boulding, K. E., 5, 37, 141, 243
Boulton, A. H., 228
Bowen, H. R., 74, 390
Bowes, A. E., 37, 44
Bradford, Z. B., 102
Brams, S. J., 308
Brandeis, L. D., 349, 357
Brantley, P., 403
Breyer, S., 338
Brief, A. P., 3
Brinkerhoff, D., 370
Brittain, J., 21
Brodeur, P., 384
Broms, H., 294
Brook, R. H., 218
Brown, B. W., Jr., 213
Brown, F. J., 102
Brown, M., 207, 209
Brown, W., 34, 78
Brown, W. B., 156
Brupbacher, J., 403
Buchanan, W., 244
Buckley, W., 7
Burgelman, R. A., 22
Burnham, J., 24
Burnham, R. A., 120, 132
Burt, R. S., 10, 21
Burton, J. W., 289, 290, 308

Cameron, K. S., 130, 369, 389
Campbell, D. T., 51, 186, 406
Campbell, J. P., 369
Cannedy, L. L., 216
Cantril, H., 244
Carlisle, E., 367

Carroll, G. R., 18–22
Carter, P., 2
Cartwright, D., 150
Casserini, K., 315
Caudill, W., 253
Chakravarthy, B. S., 392–393
Chandler, A. D., Jr., 15, 22–23, 161, 207, 210–211, 222–224, 349, 372, 399
Channon, D. F., 222, 224, 282, 283, 300
Charan, R., 338
Chayes, A., 74, 351
Child, J., 9, 372
Childers, T., 130
Cho, N., 119
Chollar, R. G., 115
Churchill, N. C., 381
Clark, D. F., 76
Clark, R. B., 156
Cleveland, F. W. C., Jr., 384
Cloward, R. A., 153
Coase, R. H., 14, 337
Coch, L., 75
Cohen, A. R., 72
Cohen, K. J., 186
Cohen, W. M., 401
Coleman, J. S., 287
Commons, J. R., 14
Conard, A., 337
Conlon, E. J., 130, 370, 389
Connaroe, J., 105
Connolly, T., 130, 370, 389
Copen, M., 279
Coriden, J. A., 97
Coser, L. A., 90, 92
Costello, T. W., 142
Cox, E. F., 168–169
Crawford, A. G., x
Crozier, M., 245, 254
Cummings, T. G., 122
Cyert, R. M., 50, 94, 158, 186, 352, 353, 383, 393

Daft, R. L., 26, 120–122, 126, 128
Dahrendorf, R., 88, 90, 365

- Dale, E., 33
 Dalton, M., 71, 273
 Damanpour, F., viii, 122, 129, 134
 Davidow, W. H., 113
 Davis, K. C., 172-176, 178, 187
 Davis, L. E., 49
 Davis, R. C., 68
 Deal, T. E., 294, 303
 Declercq, E. R., 285
 Delahanty, G., 32
 Denney, R., 68
 Deutsch, S. J., 130, 370, 389
 Dierkes, M., 391
 Dill, W. R., 142, 262-263
 DiMaggio, P. J., 13, 398
 Dimancescu, D., 228
 Dodd, E. M., 352
 Donabedian, A., 213
 Dooley, P. C., 285
 Downs, A., 124, 171, 180-181
 Drake, M. A., 126
 Drenth, P. J. D., 47
 Drobak, J. N., 186
 Drucker, P. F., 1
 Dubbin, F. R., 13
 Dukerich, J. M., 3
 Duncan, R., 121
 Dunford, R., 10, 11
 Durkheim, E., 308, 331
 Duster, T., 107
 Dye, T. R., 285
- Eccles, R. G., 17
 Edelman, L. B., 13
 Edelstein, D. J., 40
 Eells, R., 352, 383
 Ehrlich, E., 78
 Eisenhardt, K. M., 24
 Eisenstadt, S. N., 278
 Eldon, J., 49
 Elling, R. H., 142
 Emery, F. E., 7, 45-49, 51, 123, 141, 156, 162, 308
 Epstein, E. M., 95, 384, 385-387
 Epstein, R. A., 391
 Etzioni, A., 152
- Evan, W. M., 33, 37, 49-52, 67, 71, 76-77, 83, 90-91, 94, 96, 100, 108-110, 117, 120-121, 144, 145, 156, 163, 165, 171, 176, 179-181, 186, 190, 208, 244, 257, 260, 272, 287, 289-290, 307-308, 310-311, 329, 345, 365, 382-383, 391, 395, 407
 Evanisko, M. J., 120-121, 132
 Eveland, J. D., 120
- Fallers, L. A., 117
 Fama, E. F., 351
 Farmer, R. N., 264, 279
 Fayol, H., 3
 Feldman, M. S., 294
 Felker, L., 229
 Feller, I., 120
 Fellmeth, R. C., 166, 168-169, 177
 Fenn, D. H., 381, 390
 Ference, T. P., 97
 Ferry, W. H., 74
 Festinger, L., 73
 Firth, R., 265
 Fischer, G., 45
 Fisk, M., 278
 Flament, C., 150
 Flamholtz, E., 381
 Fleck, L., vii
 Foote, C., 103, 104
 Forde, D., 265
 Forest, W. H., Jr., 213
 Forkosch, M. D., 71, 90
 Forster, E. M., 360
 Fouraker, L. E., 311
 France, R. R., 33
 Freedman, J. O., 178
 Freeman, E., 338, 341
 Freeman, J., 18-19, 22, 141
 Freeman, L. C., 35
 Freeman, R. E., viii, 335, 352, 383, 395
 French, J. L. P., Jr., 74, 116, 120, 121-122, 304
 Friedland, C., 176, 336
 Friedlander, F., 392
 Friedman, M., 384
 Frost, P., 294-295

- Gahmberg, H., 294
 Galanter, M., 172, 174
 Galbraith, J. R., 126, 303
 Gallie, D., 301
 Galtung, J., 308, 310–311, 319, 327
 Gardner, B. B., 59
 Geertz, C., 247
 Gellhorn, W., 176
 Gentry, J. T., 120
 Georgopoulos, B. S., 378
 Gerlach, M., 404
 Gerstacher, C. A., 93, 289
 Ghiselli, G., 244, 255, 373, 374
 Ghorpade, J., 371
 Gibson, D., 14, 227, 403–404
 Gilpin, R., 307
 Glaser, W. A., 260, 287
 Glazer, M. P., 402
 Glazer, P. M., 402
 Glazier, N., 68
 Goffman, I. W., 34, 36
 Goldheim, D., 403
 Goldner, F. H., 97
 Goode, W. J., 5, 58, 271
 Goodman, P. S., 130, 369–370, 389
 Goodpaster, K. E., 388
 Gordon, R. A., 190
 Gouldner, A. W., 4, 55, 60, 161, 208, 269, 271
 Graicunas, V. A., 32
 Granovetter, M. S., 267
 Graves, D., 256
 Gray, D., 228–229
 Green, B. K., 115
 Green, J. A. S., 403
 Greenberg, E. S., 39
 Greenhouse, S., 1
 Greenwalt, C. H., 69, 74
 Greenwood, M. J., 255
 Gregory, K. L., 294
 Gross, B. M., 288, 377
 Gross, N., 143–144, 156–157, 170, 182, 191
 Grundstein, N. D., 172, 175
 Grzybowski, K., 310
 Guetzkow, H., 37, 41, 44

 Haar, D. ter, 320
 Haas, E. B., 310

 Haas, M., 309
 Hafsi, T., 305
 Hage, J., 10, 44, 120–122, 132, 180, 304, 308
 Hagstrom, W. O., 287
 Haire, M., 32, 71, 142, 146, 244, 255, 373, 374
 Halal, W. E., 393
 Halebsky, S., 142
 Hall, E. T., 251
 Hall, R. H., 8
 Hamilton, R., 337
 Handler, M. S., 105
 Hanks, J. J., Jr., 388, 400
 Hannan, M. T., 18–22, 141
 Harary, F., 150
 Harbison, F., 32, 244, 245
 Hartmann, H., 283
 Hatch, M. J., 294
 Hauser, A., 62
 Hawley, A. H., 18–19
 Henkow, H., 103
 Herbert, E., 228
 Herbst, P. G., 123
 Herman, E. S., 359
 Herman, L. M., 316–317
 Hertzler, J. O., 278
 Heskett, J. L., 396
 Heydebrand, W. V., 5, 179–180, 184, 213, 262, 287, 382
 Hickson, D. J., 4–5, 41, 52, 179, 184, 210, 244, 262, 270, 287, 291, 302, 372, 374
 Hilbert, R., 259
 Hinings, C. R., 4, 52, 179, 184, 210, 262, 270, 287, 372, 374
 Hippel, E. von, 234
 Hirsch, P. M., 67, 261, 293–294, 308, 373–375
 Hirschman, A. O., 87–89, 97, 108, 110, 113
 Hobbes, T., 60
 Hofstede, G., 298, 301, 304
 Holbek, J., 121
 Holdaway, E., 180
 Homans, G. C., 34, 190
 Horvath, D. K., 302
 House, R. J., 19–20
 Howell, J. E., 190

Huber, G. P., 8, 402
Hudson, M. C., 267
Hupfer, B., 119
Hylton, L. F., 142, 156

Ingham, G. K., 41
Inkeles, A., 258, 271
Inkson, J. H., 372
Inzerilli, G., 298

Jackson, J. M., 75
Jackson, N., 2
Jaffe, L. L., 177, 181, 183
Janowitz, M., 100
Jaques, E., 31, 33-34, 75
Jelinek, M., 293-294
Jennings, P. D., 13
Jensen, M. C., 337, 351-352
Jepperson, R. L., 11-12, 14
Johnston, R., 267
Jones, G. R., 294
Jorgensen, J. J., 305
Joskow, P. I., 176
Joynt, P., 224
Judge, A. J. N., 323, 331
Jurkovich, R., 261

Kahn, H., 331
Kahn, R. L., 7-8, 50, 77, 80, 88,
141-142, 156, 170, 190, 287,
374
Kaluzny, A. D., 120
Kalven, H., Jr., 172
Kant, I., 335-336, 342, 344
Kanter, R. M., 227, 370, 401-404
Kapoor, A., 247, 269, 308
Kasarda, J. D., 22
Kass, B. L., 175
Katsh, S., 338
Katz, D., 7-8, 50, 141, 156, 190,
374
Katz, R., 405
Kaufmann, O., 313
Kavčič, B., 46
Keegan, W. J., 289, 401

Kelley, H. H., 72
Kelly, L., 301
Kelman, H. C., 328
Kennedy, A. A., 294, 303
Keohane, R. O., 289-290, 307
Keyfitz, N., 325
Kiggundu, M. N., 305
Kilmann, R. H., 297
Kim, L., 132
Kimberly, J. R., 22, 120-121, 132,
180
Kindleberger, C. P., 311, 315-317
Kircher, P., 70
Kirkpatrick, M. W., 168-169
Klages, H., 267
Kluckhohn, C., 246-247, 295
Kluckhohn, F. R., 243, 248, 253,
295, 296-302
Knight, K. E., 122
Kogut, B., 298, 403
Kolaja, J., 45, 46
Koput, K. W., 21
Kotre, J. N., 99
Kotter, J. P., 396
Kravetz, D., 189
Kriesberg, L., 311, 325
Kroeber, A. L., 246-247, 295,
300
Kuhn, T. S., vii, 172, 401

Lakatos, I., 2
Lammers, C. J., 45, 244, 302
Land, K. C., 267
Landis, J. M., 176
Lang, K., 100
Lawler, E., III, 373-374
Lawrence, P. R., 125, 130, 141, 264,
284, 287, 303, 373-374, 381
Lazar, J., 33
Lazarsfeld, P. F., 35, 191, 213, 324,
374
Leavitt, H. J., 41, 44, 74, 150
Lee, G. L., 372
Leeds, R., 324
Lehman, E. W., 207
Lenski, G. E., 34
Leontief, W. W., 150
Levin, E. G., 94, 165, 272

- Levin, V., 119
 Levine, A., 120, 284
 Levine, S., 142, 148, 262
 LeVine, R. A., 327
 Levinthal, D. A., 401
 Lévi-Strauss, C., 265, 267
 Levy, M. F., 143
 Lewin, A. Y., 26
 Lewin, K., vii
 Lewis, H. L., 207, 209
 Lind, E. A., 186
 Lindgren, N., 228
 Lindzey, G., 253
 Lipset, M., 104
 Lipset, S. M., 31, 50, 75
 Litwak, E., 142, 156, 180, 308
 Loksa, E., 103
 Lorsch, J. W., 125, 130, 141, 264,
 303, 373–374, 381
 Louis, M. R., 295
 Luard, E., 309
 Luckman, T., 389
 Lumsden, C. J., 19
 Lundberg, C., 295
 Lunsford, T. F., 105
 Luszki, M., 64

 Macaulay, S., 143, 159
 Mahajan, V., 215
 Mahoney, L. J., 105
 Mahoney, T. A., 123
 Maitland, F. W., 355
 Malone, M. S., 113
 Mann, F. C., 378
 Mannheim, K., 56
 Mansfield, E., 123
 March, J. G., 50, 94, 158, 179, 352,
 353, 383, 393, 402
 Marcson, S., 61
 Marsh, R. M., 244
 Marshall, T. H., 91–92
 Martin, J., 294
 Martin, N. H., 70
 Maruyama, M., 375
 Marx, K., 278
 Mason, E. S., 74, 207, 350, 156
 Mason, W. S., 143–144, 157, 170,
 182, 191
 Masten, S., 17

 McDill, M. S., 22
 McEachern, A. W., 143–144,
 156–157, 170, 182, 191
 McEwen, W. J., 149
 McGuire, J. W., 190
 McKelvey, B., 21
 McMillan, C. J., 179, 262, 286
 McNeil, M. C., 209
 McSweeney, E., 395
 McWhinney, W. H., 49
 Meadow, A., 255
 Means, G. C., 24–25, 88, 93, 336,
 349–350
 Meckling, W., 337, 351, 352
 Mehta, R., x
 Meinhard, A. G., 19, 20
 Meji, J. L., 32
 Melman, S., 32, 33, 44, 47
 Menzel, D. C., 120
 Menzel, H., 191, 213
 Meriam, C. E., 96
 Merrill, F., 186
 Merritt, R. L., 244, 267
 Merton, R. K., 2, 30, 68, 143–145,
 149, 156, 182, 191, 259, 266,
 268–272, 300
 Metcalf, H. C., 74
 Meyer, J., 37
 Meyer, J. W., 11–12, 398
 Meyer, M. W., 41, 113, 179
 Michel, R., 25, 29, 40, 46, 88
 Miles, C. M., 312–313
 Miles, E., 308
 Miles, R. H., 22, 123, 130
 Miller, A. S., 74
 Miller, B., 40
 Miller, D. R., 73
 Miller, G. A., 44
 Miller, J. G., 2, 5–6, 8, 141,
 374
 Millett, J. D., 143
 Mills, C. W., 280
 Millstein, I., 338
 Mintz, M., 167
 Mintzberg, H., 4, 29, 359
 Mitchell, C. J., 267
 Moch, M. K., 121
 Mohr, L. B., 120–121
 Monteverde, K., 17
 Moore, L. F., 2, 295

- Moore, W. E., 258, 264, 266-267
 Morris, C., 253
 Morrison, A., 401
 Morse, E. V., 121
 Morse, N. C., 41, 43, 75
 Morton, J. S., 163
 Mott, R. L., 74, 378
 Mulder, M., 45, 47
 Muller, R., 93
 Myers, C. A., 244-245
- Nadel, S. F., 265, 267
 Nanus, B., 406
 Nath, R., 308
 Nathanson, D. A., 126, 303
 Negandhi, A. R., 256, 301-302, 373, 374, 381
 Neuhauser, D., 213
 Nonaka, I., 119
 Nonet, P., 171, 180, 185
 Norman, R. Z., 150
 North, D., 336
 Nye, J. S., Jr., 289-290, 307, 310
- Obradović, J., 46
 Ogburn, W. F., 113-114, 122
 Ohe, W. von der, 119
 Okun, A. M., 359-361
 Oliver, C., 26
 Olk, P., viii
 Olsen, H. A., 126
 Oppenheim, D. M., 329
 Osgood, C. E., 247, 253
 Osipov, G., 119
 Ouchi, W. G., 17, 231-232, 294, 303
- Palamountain, J. C., Jr., 147
 Parsons, T., 12, 103, 108, 142, 161, 247-248, 249, 251, 255, 260, 265, 269, 278, 281, 300, 375
 Pascale, R. T., vii, 114, 294, 303
 Payne, R. L., 372
 Peel, R. V., 176
 Pennings, J. M., 130, 369-370, 381, 389
 Perkins, J. A., 107
 Perlmutter, H. V., 311, 316, 401
- Perrow, C., 215-216, 222, 352, 354
 Peters, E. H., 97
 Peters, T., 1, 303, 342, 356
 Petersen, T., 21
 Petit, M. J., 231
 Pettigrew, A. M., 294, 297
 Pettit, R. G., 194
 Pfeffer, J., 8-10, 18, 142, 208, 285
 Phelan, J., 272-273, 285
 Pheysey, D. C., 179, 372
 Phillips, A., 156, 158
 Pickering, J. W., 285
 Pickle, H., 392
 Pierson, F. C., 190
 Pinder, C. C., 2
 Pisano, G. P., 405
 Pizam, A., 301
 Platt, G. M., 103, 108
 Pointer, D. D., 216
 Pondy, L. R., 41
 Pool, I. de Sola, 267
 Poppo, L., 17
 Porter, L. W., 244, 255, 373-374
 Porter, M. E., 305
 Portnoy, S., 209
 Posner, R. A., 170, 177-178
 Powell, W. W., 13, 398, 403-404
 Pozen, R., 272-273, 285
 Presthus, R. V., 243
 Preston, L. E., 392-393
 Price, J. L., 52, 130, 371, 378, 381
 Przeworski, A., 252
 Pugh, D. S., 4, 52, 179, 184, 210, 262, 270, 287, 372, 374
 Pyle, W. C., 381
- Quine, W., 336
 Quinn, J. B., 315
- Radcliffe-Brown, A. R., 265
 Rafferty, J., 209, 216
 Rankin, A. C., 65
 Rapoport, A., 5, 104, 376
 Rapoport, J., 120
 Rappaport, A., 383
 Rawls, J., 336
 Rayton, D., 47
 Reed, D., 341

- Reeser, C., 301
Reichel, A., 301
Reimann, B. C., 256, 373–374, 381
Reimer, E., 41, 43, 75
Reissman, L., 68
Richardson, F. L. W., Jr., 32
Richman, B. M., 264, 279
Ridgeway, V. F., 142, 150
Riesman, D., 68, 206
Rightor, H. H., 98
Riley, J. W., Jr., 143
Riley, P., 294
Ritti, R. R., 97
Roberts, K. H., 254
Robins, J. A., 17
Robinson, R. D., 311, 317, 328
Robock, S. H., 316
Rockwood, C. E., 131
Rockwood, R. H., 131
Rodgers, R. S., 325, 326
Roessner, J. D., 137
Roethlisberger, F. J., 59
Rogers, E. M., 116, 120, 122, 304
Rokkan, S., 37, 244, 267
Rolfe, S. E., 311, 315
Romanenko, I., 119
Romeo, A. A., 120
Rosner, M. M., 120
Ross, I. C., 75
Ross, S. A., 351
Rossi, P. H., 271
Rostow, E. V., 350
Rothermel, T. W., viii, 308
Rothman, J., 156, 180, 308
Rowan, B., 11, 12, 398
Rowat, D. C., 176
Rowe, L. A., 121
Rowe, W. D., 186
Ruchlin, H. S., 216
Ruedi, A., 284, 287
Rumelt, R. P., 210, 222, 224
Rupert, A. A., 328–329
Rus, V., 46
Rushing, W. A., 41, 50
Rutenberg, D. P., 313
Ruud, A., 103
Rybczynski, W., 398
Saaty, T., 353
Salancik, G. R., 8–9, 142, 208
Sapienza, H. J., 392–393
Scarr, H. A., 253
Schein, E. H., 293–294, 297, 301
Schoeman, M. E. F., 215
Schoenherr, R. A., 179, 184, 210, 259, 270, 287, 372, 374
Schokking, J. J., 310, 325
Schön, D. A., 116, 402
Schrage, L., 186
Schulman, J., 136
Schulz, J. E., 168–169
Schwartz, B., 174–177
Schwartz, M. A., 145, 181
Schwartz, R. D., 186
Schweitzer, S. O., 209, 216
Scott, J., 21
Scott, W. G., 77
Scott, W. R., 4, 12, 31, 78, 213, 389, 398
Seashore, S. E., 8, 130, 378
Seavey, W. A., 354
Seeman, M., 43
Seiler, J. A., 7
Selekman, B. M., 73
Selznick, P., 142, 171, 185
Servan-Schreiber, J. J., 313
Shan, W., 403
Shapiro, E., 335
Shaw, S., 267
Sheldon, E. B., 264, 266–267
Shepard, H. A., 115
Sherif, M., 71
Shils, E. A., 248
Shoemaker, F. F., 122
Shonfield, A., 267
Shortell, S. M., 213, 219
Sigler, J. A., 186
Simmel, G., 90
Simmons, K., 316
Simmons, V. M., 294
Simon, H. A., 29, 41, 44, 142, 179, 208, 378, 398
Singh, H., viii, 298
Singh, J. V., viii, 19, 20
Sirota, D., 255
Sitkin, S. B., 294
Skilton, R. H., 91
Skjelsbaek, K., 289, 308, 318

- Slocum, J. W., Jr., 255
 Smelser, N. J., 266, 278
 Smilor, R. W., 14, 227, 403-404
 Smircich, L., 293-294
 Smith, C. G., 41, 44
 Smith, K. K., 294
 Smoker, P., 311, 318, 328
 Solomon, D. N., 61
 Spero, S. D., 149
 Spray, S. L., 130
 Springate, D. D., 209
 Srivastva, S., 122
 Staehl, W. H., 283
 Steers, R. M., 130, 369
 Stern, M., 273
 Stigler, G. J., 176, 336
 Stinchcombe, A. L., 22, 39, 260, 266, 268, 271, 278, 300, 373
 Stopford, J. M., 311
 Strauss, L., 70
 Strodbeck, F. L., 243, 248, 253, 295-297, 302
 Struzzo, J. A., 98
 Stryker, P., 72
 Summers, C., 338
 Suojanen, W., 32, 79
 Sutton, F. X., 86
 Swanson, G. E., 73, 267

 Takezawa, S., 255
 Tannenbaum, A. S., 29, 41, 44, 46, 50
 Taylor, C. L., 267
 Taylor, C. S., 267
 Taylor, F. W., 3, 142
 Teece, D. J., 17, 123
 Teulings, A. W. M., 39, 119
 Teune, H., 252
 Thibaut, J., 186
 Thompson, J. D., 149, 262-263, 288, 308
 Thompson, V. A., 121, 146
 Thorsrud, E., 45-49, 51
 Tolbert, P. S., 13
 Touraine, A., 33
 Triandis, H. C., 52, 247, 253
 Trimberger, E. K., 104
 Trist, E. L., 7, 44, 49, 123, 141, 156, 162, 308

 Trompenaars, F., 298
 Trow, M., 31
 Troy, L., 381
 Tucker, D. J., 19, 20
 Tumin, M., 280
 Turk, H., 268, 308
 Turner, C., 4, 52, 179, 184, 210, 262, 270, 287, 372, 374
 Turner, J. S., 166-168, 177
 Tyler, E. B., 246

 Udy, S., Jr., 35, 260, 263, 266
 Ulian, J., 336
 Ulrich, D., 9
 Ungson, G. R., 402
 Urwick, L. T., 32
 Useem, M., 405

 Vallier, I., 264, 267-268
 Van Alstyne, W., 106-107
 Van de Ven, A. H., vii
 Van Gils, M. R., 44, 47-48
 Van Gorkum, P. H., 46
 Vargas, L. G., 353
 Veney, J. E., 120
 Vernon, P. E., 253
 Vernon, R., 93, 311, 317
 Vickers, G., 90
 Vilarino, J. P., 259
 Vroom, V., 373-374

 Wade, H. W. R., 174-177
 Walker, C. R., 32
 Walker, D. R., 22
 Walker, G., 17, 403
 Walker, J. L., 120-121
 Walker, L., 186
 Wallman, S. M. H., 349, 386, 395, 400
 Walsh, J. P., 402
 Walton, C., 352, 383, 384
 Walzer, M., 92, 108
 Warner, M., 244
 Warren, R. L., 156
 Waterman, R., 1, 303, 342, 356
 Webb, E., 378
 Weber, D., 17

- Weber, M., 3, 23, 29, 40, 78, 88,
173, 282, 370
Weick, K. E., 295
Weiler, J. E., 335, 395
Weitzel, W. W., 123
Well, L. T., 308
Wellman, B., 259
Wells, H. B., 228
Wells, L. T., 317
Westermarck, E., 60
Wheeler, S., 153
Whetten, D. A., 130, 369, 389
Whisler, T. L., 42, 70, 74
White, C. W., 17
White, L. C., 311, 325–326,
329
White, P. E., 142, 148, 262
Whitehill, A. M., 255
Wholey, D. R., 21
Whyte, W. F., 59, 255
Whyte, W. H., 68–69, 305
Wiener, A. J., 331
Wilensky, H. L., 319, 401
Wilke, H., 47
Wilkins, A. L., 294
Williams, L. K., 255
Williamson, O. E., 14–16, 18, 23,
94, 156, 164, 337, 351, 372,
399, 404
Wilson, G. J., 115
Winch, R. F., 35
Wolin, S. S., 104
Woodward, J., 41
Woodward, J. W., 114
Wray, D. E., 59
Wright, C., 227, 230

Yuchtman, E., 8, 130, 378

Zalkind, S. S., 142
Zaltman, G., 121
Zeisel, H., 186
Zelditch, M., Jr., 37, 76
Zeleny, M., 353
Zucker, L. G., 12–13, 21, 113
Županov, J., 46
Zurcher, L. A., 255
Zurcher, S. L., 255
-

Subject Index

- Absenteeism, 43
 - rates of, 43
- Absent without leave (AWOL), 102
- Academic organization, 103
- Accidents, 43
 - rates of, 43
- Acquisitions, 10
- Action research, 48
- ADELA, 329
- Administration to production
 - personnel ratio, 32, 42
- Administrative adjudication, 173
 - direction of, 173
- Administrative agencies, 173–175,
177, 180, 184, 186
 - captured by the regulated industries,
177
 - doctrine of delegation of power, 175
 - life cycle hypothesis, 177
- Administrative Conference of the
United States, 178
- Administrative innovations, 113–114,
116–117, 124, 127–128, 136–137
 - resistance to, 116
 - trickle-down theory, 117
 - trickle-up theory, 117
- Administrative intensity, 179
- Administrative law, 172, 174, 187
 - administrative law in action, 187
 - definition of, 174
 - trends in American, 174
- Administrative law judges, 178, 183
- Administrative process, 173, 181
 - organization-set model of, 181
- Agency problem, 351
- Agency theory, 24, 25
- Allport, Vernon and Lindzey's Values
Test, 253
- American administrative law, 175
 - four stages of, 174–175, 187
- American Association of Collegiate
Schools of Business, 192
- American Association of Railroads,
166
- American Bar Association, 169
- American Civil Liberties Union,
105
- American Hospital Association, 213
- American Law Institute, 347, 356,
386
 - restating principles of corporate
governance, 386
- American Medical Association, 167
- American Trucking Association,
166
- Anglo-Saxon legal system, 89–90
- Antitrust law, 158
- Appeal procedure, 84
 - internalization of, 84
- Appeal system, 84, 86
 - formal, 84, 86
 - informal, 84, 86
- Applied research, 56
 - definition of, 56
- Arbitration, 143
- Aston studies, 52
- AT&T, 338, 341
- Authority, 88, 149
 - centralization of, 149
- Authority structure, 97
 - hierarchical and centralized,
97
- Auto-kinetic effect, 71
- Basic research, 56
 - definition of, 56
- BELLCORE, 231
- Berle and Means' thesis, 350
- Bill of Rights, 74

- Blue Cross, 209
- Bootleg project, 115
 - example of, 115
- Boundary personnel, 160, 183, 269, 287
 - degree of expertise of, 161
 - number of, 147
 - normative reference group orientation, 161
 - role-sets of, 160
- Boundary relations, 142
- Boundary roles, 160
 - input, 160
 - output, 160
- Boundary spanning, 12
- Boundary-spanning units, 13
- Bounded rationality, 15
- Bureaucratic administration, 46
- Bureaucratic authority, 3
 - characteristics of, 3
- Bureaucratization, 4
 - in modern society, 4
 - trend toward, 68
- Business consortium, 228
- Business ethics, 383, 385
 - focus of, 385
- Business Roundtable, 347

- CAD/CAM software, 233
- California's Industrial Accident Commission, 180
- Cambridge University, 273
- Canon Law Society, 98
- Capitalist democracy, 360, 366
 - incongruence between the political and economic institutions of, 360
- Cartels, 10
- Catholic Church, 92, 97, 99
- Causal model, 43
- Caveat emptor, 338
- Celibacy, doctrine of, 88
- Center for Advanced Television Studies, 227, 233
- Central American Common Market, 310
- Centralization, 4–5, 44
 - degree of, 4, 44
- Centralization of decision making, 179, 181, 183
 - degree of, 183
- Centrally planned economy, 281

- Chandler's model of strategy and structure, 211, 214
- Change agents, 163
 - external, 163
 - internal, 163
- Character structure, 68
 - inner-directed, 68
 - other-directed, 68
- Chrysler Corporation, 342, 355–356
 - application of the principles of fiduciary management during crisis, 356
 - superordinate goal of corporate survival, 355
 - threat of bankruptcy, 355
- Circular organization, 39
 - model of, 39
 - organizational democracy, 359
- Citizenship, 91
 - evolving concept of, 91
- Civil Rights Act of 1964, 13
- Clayton Act of 1914, 285
- Clean Air Act of 1970, 338
- Clean Water Act of 1970, 338
- Closed systems, 5
- Coalition formation, 163
- Coca-Cola, 231
- Code of Federal Regulation, 173
- Codes of ethics, 94
- Co-efficient of interconnectedness, 150
- Coercive organizations, 152
- Collective bargaining, 90
- Colleges, 52
- Collegial authority, 104, 290
- Columbia University, 105, 192
- Committee on Corporate Laws, 386
- Common law, 47, 95, 106
- Communication network experiments, 159
- Comparative management, 244, 247
- Comparative organizational research, 262, 382
 - Aston study, 262
 - cross-cultural, 382
 - cross-national, 37, 382
 - cross-organizational, 37, 382
- Comparative reference organizations, 145, 149
- Comparative research, 37
 - experimental, 37
- Competitive market, 208

- Computer simulation, 186
- Computer technology, 42
- Conflict groups, 88
- Conflict resolution, 82
 - bilateral resolution, 82
 - multilateral resolution, 82
 - type of, 82
 - unilateral resolution, 82
- Conflicts, 87, 88
 - power and, 88
 - property, 88
 - sources of, 88
- Conformity, 73
 - overt, 73
- Conformity patterns, 71
- Consortia of colleges and universities, 228
- Consortia formation, 163
- Consortium management, 232
- Constituencies, 94
- Constituency model, 130
- Constitutionalism, 87, 108
 - components of, 87
- Constitutionalization, 109
 - process of, 109
- Consumer Product Safety Commission, 338
- Contingency theory, 125, 208, 373
 - goodness of fit, 208
- Contract law, 15
 - incidence of noncontractual relations, 143
 - type of, 15
- Cooperation, 163
- Cooptation, 163, 185
- Cornell University, 107, 192
- Corporate audits, 381
- Corporate authority, 92
- Corporate citizenship, 93
- Corporate constituency statutes, 386
- Corporate democracy, 364, 365
 - based on stakeholder management principles, 365
 - distinguished from principles of socialism and communism, 365
 - principles of, 364
- Corporate governance theories, 24
 - agency theory, 24
 - managerialism, 24
 - stakeholder theory, 24
- Corporate law, 95, 346, 354
 - corporate personality, 354
 - limited liability, 354
- Corporate loyalty, 67
- Corporate managers, 70, 73, 352
 - agents of stockholders, 352
 - principles of the corporation, 352
- Corporate power, 351
 - legitimacy of, 351
- Corporate social audit, 390
- Corporate social responsibilities, 383–385
 - Epstein's nine principles, 384
 - focus of, 385
 - maximalist position, 384
 - minimalist position, 384
- Corporate stakeholder audit, 383, 391
 - prospects for institutionalization, 383, 395
- Corporate welfare function, 390
- Corporation, 337
 - artificial person, 355
 - corporate personality, 337
 - governance of, 383
 - immortality, 337
 - redesigned as a democratic institution, 361
 - self-perpetuating oligarchy, 361
- Corporation for Open Systems International, 227, 231, 233
- Cosmopolitan orientation, 330
 - local orientation, 330
- Council on Mutual Economic Aid (CEMA or COMECON), 310
- Cross-national research, 264
- Cultural effects, 256
- Cultural lag, 113–114, 122
- Cultural parameter, 52
- Cultural variables, 254, 257
- Culture, 243, 245, 247, 252, 257, 298
 - four dimensions of, 298
 - measuring of, 252
 - multidimensional definitions of, 252
 - normative dimensions of, 243, 247
 - normative dimension, 247
 - organizationally relevant model of, 245, 257
- Culture Gap Survey, 297
- Curricular philosophy, 191

- Decentralization of decision making, 181
- Department of the Army, 100
- Department of Defense, 174
- Department of Health and Human Services, 166
- Department of Justice, 158, 177, 231
- Department of Public Libraries, 127
- Dependence, 10
 - absorption of, 10
 - negotiation of, 10
- Destratification, 49
- Destratification-rationalization hypothesis, 50
- Development (R&D), 56
 - definition of, 56
- Director's fiduciary duties, 349
 - legislative developments concerning, 349
- Discretionary managers, 94
- Displacement of goals, 149
- Dixon v. Alabama State Board of Education* in 1961, 107
- Dominant paradigm, vii, 172
- Dow Chemical Company, 93
- Dual ladder, 115
- Due Process Clause, 74
- Due process of law, 33, 79, 89–90
 - procedural, 33, 90
 - substantive, 90
- Due process norms, 82–83, 85, 87, 89–91, 97
 - institutionalization of, 82–83, 85
 - internalization of, 83, 85
- Du Pont Company, 32, 231, 273, 283–285, 356

- Echelons, 4
 - number of, 4
- Ecole Polytechnique, 273
- Economic democracy, 360
- Economic development, 305
 - influence of cultural and sociostructural factors on, 305
- Economic institutions, 359
 - domain of dollars, 359
- Ecumenical Vatican Council II, 97
- Educational Testing Service, 191
- Electric Power Research Institute (EPRI), 228
- Elite educational system, 281

- Emergence of four multihospital systems, 214
 - consortium, 214
 - corporate management system, 214
 - joint venture, 214
 - merger, 214
- Entrepreneurial managers, 94
- Entrepreneurs, 349
- Environmental adaptations, 403–404
 - interfirm agreements, 403
 - interorganizational partnerships, 404
 - operative organizational networks, 404
 - strategic alliances, 403
- Environmental determinism, 208
- Environmental embeddedness, 5
- Environmental monitoring, 401
 - boundary-spanning departments, 401
 - investing in R&D, 401
 - strategic position of multinational corporations, 401
- Environmental pressures, 399–400
 - changes in business style, 400
 - changes in legal system attributes and provisions, 400
 - changes in market structure, 399
 - changes in societal cultural patterns, 400
 - changes in stakeholder expectations, 400
 - technological changes, 400
 - types of environmental impingements, 399
- Environments, 245
 - cultural component of, 245
- Episcopal Church, 97
- Equal Pay Act of 1963, 338
- Espionage, 143
- Ethical resisters, 402
- Eton, 273
- European Economic Community, 313
- European Federation of National Associations of Engineers, 319
- Executive Order 11246 in 1965, 13
- Experimenting society, 51
- Externalities, 391
- Exxon Corporation, 231

- Faculty interchange, 202
- Farbwerke Hoechst, 283

- Federal Communications Commission, 183
- Federal Technology Transfer Act of 1986, 404
- Federal Trade Commission, 155, 158, 164, 168, 176
- Feedback effects, 182–183, 376
- Feedback loop, 257, 376
- Fiduciary, 94
 - concept of, 94, 354
 - duties of loyalty and trust, 94
- Fiduciary management, 87, 93–95, 109, 349
 - beneficiaries of, 95
 - concept of, 349
 - emergence of, 109
- Field experiments, 48, 110, 186
- Fifth Amendment, 90
- Firm as a social system, 50
 - polyarchical, 50
 - polycentric, 50
- Focal organization, 141, 148, 157–158, 182, 275–276, 287
- Food and Drug Administration, 155, 166, 177
- Ford Motor Company, 17, 33, 157–158, 341
- Formalization, 4–5, 179, 181
 - degree of, 4, 179, 183
- Formally rational legal system, 281
- Formally or substantively irrational legal system, 281
- Fourteenth Amendment, 74, 90
- French organizations, 245
 - avoid face-to-face relationships, 245
 - fear of dependence, 245
- Functional coordination, 210
- Functional equivalence, 252–253
 - principle of, 252
 - problem of, 253
- Functional integration, 210
- Functional specialization, 179
- Futurology, 288
- Garner v. Wolfinbarger* (1970), 355
- Gas Research Institute, 228
- General Agreement on Tariffs and Trade (GATT), 317
- General Electric Corporation, 352
- General Motors, 17, 152, 210, 275, 286, 329
- Glacier Metals Company, 33–34, 75
- Globalization of markets, viii
- Governance structures, 15–16, 24
- Government Administration, 172
- Government agencies, 171
- Government regulation, 212
- Government research laboratory, 77, 79
- Graduate schools of business, 189, 193–194
 - faculty interchange, 189
- Graph theory, 150
- Greedy organizations, 92
- Greenman v. Yuba Power* in 1963, 337
- Grocery Manufacturers of America, 167
- Guttman scale model, 34
- Halal's return-on-resources model, 393
 - applicable to any organization, 393
- Hall's proxemics theory, 251
- Harrow, 273
- Hazard models, 22
- Hierarchical conflicts, 77
 - incidence of, 80
 - resolution of, 83
 - types of, 81
- Hierarchical differentiation, 249
- Hierarchical structure, 29–30, 34–35, 37, 43, 113
 - analysis of causes and consequences of, 35
 - comparative study of, 36
 - five types, 29
 - hierarchy of authority, 30
 - hierarchy of rewards, 31
 - hierarchy of skill, 32
 - measures of, 34
 - measuring the degree of, 37
 - organizational profiles, 43
 - some indices of, 30
- Hierarchical transactions, 14
- Hirschman's theory, 89, 108–110
 - exit and voice, 89
- Hofstede's model of national cultural patterns, 298
- Homeostatic mechanisms, 89
- Horizontal integration, 10
- Hospital(s), 52
- Hospital chains, 209
- Hospital performance, 213
 - outcome quality, 213
 - process quality, 213

- Hospital performance (*continued*)
 - quality of, 213
 - structure quality, 213
- Hospital strategy, 222
 - measure of, 222
- Human resource accounting, 381
- IBM, 32, 115, 317, 356
- Ideology of experimentation, 51
- Imperial Chemical Industries, 297
- Inbreeding, 189, 203, 204
- Incommensurability of theories, 26
 - problem of, 26
- Inducement-contribution theory, 142
- Industrial democracy, 41, 45–46, 49, 51
 - dilemmas of, 41
 - literature on, 45
 - research on, 49
- Industrialism, 319
 - emergence of, 319
- Industrial laboratories, 62
- Industrial organization, 2, 43
- Industrial organizations, 52, 78
- Industrial research laboratory, 77
- Industrial research organization, 79
- Industry/University Cooperative Research Centers (IUCRCs), 229
- Informal appeal system, 83
- In loco parentis, 106
- Innovation, 113, 114
 - process of, 114
 - recurrent process of, 113
- Innovation processes and
 - organizational learning, 405
 - changes in corporate governance, 405
 - introduction of program of vertical, forward, and lateral integration, 405
 - new organizational technologies, 405
- Innovations, 120–122
 - administrative, 116, 120, 121
 - adoption of, 120
 - definition of, 120
 - diffusion of, 120
 - dynamics of, 124
 - four attributes of, 122
 - process of, 126
 - technical, 116, 120–121
- Innovative organization, 406
 - test validity of proposals for organizational redesign, 406
 - viewed as experimenting organization, 406
- Input-output analysis, 150–152, 182–183
 - technical coefficients, 151
- Inspector General, 100
- Institutional design, 89, 108
 - improvement of, 89
- Institutional economics, 2
- Institutional environments, 21
- Institutional personnel, 249
- Institutional profile, 282
- Institutional redesign, 89
- Institutional spheres of a society, 280
 - stratification of, 280
- Institutional theory, 2, 11, 13, 19, 398
 - institution, 11
 - institutional isomorphism, 11, 398
 - institutionalization, 11
 - legitimacy, 10
 - new institutionalism, 13
 - old institutionalism, 13
- Institutionalization of dissent, 50
- Institutionalizing corporate stakeholder audits, 395
 - legal reforms of the governance structure of the corporation, 395
 - reforms in acknowledging corporate roles of stakeholders other than shareholders, 395
 - stimulate implementation of corporate stakeholder audits, 395
 - voluntary efforts to institutionalize the corporate stakeholder audit, 395
- Institutionalizing due process protections, 13
- Integration of the international system, 310
 - economic, 311
 - normative, 311
 - occupational, 311
 - organizational, 311
- Interest groups, 88
- Interfirm agreements, 403
- Interfirm organization, 158
- Interhospital linkages, 207
- Interlocking directorates, 10, 285

- Internal Revenue Service, 275
- International Council of Scientific Associations, 320
- Internationalization of the social sciences, 244
- International nongovernmental organization (INGO), 288–289, 308, 318
- International Political Science Association, 244
- International professional associations, viii, 244, 307–308, 328
- International Social Science Council, 327
- International Sociological Association, 244, 324
- International Statistical Institute, 325
- International system, 308–309, 312, 317, 332
 - alternative models of the integration of, 309
 - degree of integration of, 309
 - Durkheim's theory of a solidary function of occupations, 332
 - four dimensions of, 308
 - hypothesis on the integration of, 327
 - nonlinear model of the integration of, 312
- International Typographical Union, 75
- Interorganizational coordination, 212
- Interorganizational dynamics, 308
- Interorganizational environments, viii, 249
- Interorganizational interdependence, 9
- Interorganizational networks, viii, 139, 207, 259
 - analysis of, 259
- Interorganizational relations, 108, 142, 144, 150, 152, 156, 160, 171, 187, 204, 206, 208
 - interhospital relations, 208
 - personnel flows, 189
 - strategy, structure, and performance model, 210
 - systems model of, 156
- Interorganizational strategic alliances of noncompetitive corporations, 404
- Interorganizational strategy, 212, 403
- Interorganizational structures, 209, 217
 - centralization, 217
 - departmentation, 217
 - integration, 217
 - standardization, 217
- Interorganizational system, 155, 157, 225, 249
 - four components of model, 157
- Interrelationship of strategy, structure, and performance, 225
- Inter-role conflicts, 77
- Interstate Commerce Commission (ICC), 155, 164–165, 174, 177
 - canons of conduct, 166
- Intrapreneurship, 114
- Iron law of oligarchy, 29, 37, 40, 46, 88
- Japanese factories, 31
- Job rotation, 75
- Job transfer, 75
 - right of, 75
- Joint ventures, 10
- Junior management, 70–72, 75
- Kant's principle of respect for persons, 340, 344
- Keiretsu, 404
- King Solomon, 343
- Kraft, 231
- Krupp, 329
- Laboratory experiments, 44, 76, 110
- Labor-management relations, 36
 - degree of conflict in, 36
- Labor unions, 277
- Latin American Free Trade Area, 310, 325
- Law of corporations, 336
- Law of requisite variety, 6
- League of Nations, 309–310
 - failure of, 310
- Legal environment, 13
- Legal institutions, 12
- Legal or jurisprudential theory of organization, 78, 86
- Legal system, 78, 79
 - model of, 79
 - norms of, 78
 - specialized statuses of, 78
- Legitimacy of corporate power, 350
- Levels of management, 42

- Life cycle hypothesis, 177
- Litigation, 143
- Local orientation, 330
 - cosmopolitan orientation, 330
- Lorenz curve, 32, 41
- Lotka-Verhulst model, 19, 22
- Loyalty, 89, 161
 - concept of, 89
 - exit and voice, 89
- Macro-societal variables, 243
- Magna Carta, 74, 90
- Make-or-buy decision, 17
- Management, 23, 73
 - active role, 23
 - conflicts between staff and line, 73
 - inactive role, 23
 - proactive role, 23
 - reactive role, 23
- Management Bill of Rights, 346
- Management information system, 217, 390
- Management occupation, 70
 - structure of, 70
- Managerial capitalism, 336–337, 339
 - attack on, 337
 - invisible hand doctrine, 339
- Managerial discretion, 351
- Managerialism, 24, 49
- Market economy, 49, 281
- Market failure, 14
- Markov chain model, 152
- Marsh v. Alabama*, 338, 346
- Marx's theory of class conflicts, 88
- Mass educational system, 281
- Massey-Ferguson, 329
- Master-journeyman relationship, 64
- Matrix management, 114
- Maximum-minimum earnings, 42
- Measures of administrative and technical innovations, 129
 - absolute measure, 129
 - relative measure, 129
- Mediation, 143
- Medical technology, 207, 212
- Mergers, 10
- Metaphysical director, 388
- Microelectronics and Computer Technology Corporation (MCC), 14, 227, 230, 233
- Middle management, 70–72, 75
- Middle-range theories, 2
 - implications for managerial roles and organizational designs, 22
- Military Occupational Specialty, 101
- Military ombudsman systems, 103
- Models of organizations, 29, 208
 - natural system, 208
 - pyramid as a, 29
 - rational model, 208
- Modern corporation, 15, 18, 335–336, 339, 349–352, 359
 - democratic entity, 350
 - democratizing the corporation, 359
 - emergence of, 349
 - endocratic entity, 350
 - legitimacy of, 339
 - republic in miniature, 351
 - role of management, 343
 - rule of law, 351
 - separation of ownership and control, 88, 350, 352
 - stakeholders in, 341
 - stakeholder theory, 336, 339
 - visible hand of, 15
- Modernization, 173, 258
 - convergence theory of, 258
- Modern science and technology, 319
 - rise of, 319
- Monopolistic industries, 36
- Monopolistic markets, 177
- Motor Carrier Lawyers Association, 166
- Multidivisional structure (M-form), 16, 283, 373
 - progressive adoption of, 283
- Multifiduciary stakeholder orientation, 388
- Multihospital systems, 207, 209, 212, 214, 219, 222–224
 - consortium, 207, 223
 - corporate management system, 207, 224
 - emergence of, 214
 - interrelationship of strategy, structure, and performance, 224
 - joint venture, 207, 224
 - merger, 207, 224
 - multi-unit organizational arrangements, 219
 - performance of, 217
 - relationship between strategy and structure, 224

- strategy of, 214
- structure of, 217
- Multinational corporations, viii, 93, 244, 256, 286, 288-290, 303, 307-308, 310, 313, 315, 317, 328
 - anational companies, 290
 - capital transfer, 315
 - hazard of nationalization, 317
 - organizational subculture of, 256
 - technology transfer, 315
- Multiparty system, 281
- Multiple constituency perspective, 389
- National Association of Securities Dealers, 165
- National Association of Student Personnel Administrators, 105
- National Automobile Dealers Association (NADA), 147, 159
- National Center for Manufacturing Sciences, 231
- National Competitiveness Technology Transfer Act of 1989, 404
- National Cooperative Research Act (NCRA) in 1984, 14, 227, 230, 404
- Nationalization of industry, 45
- National Labor Relations Act of 1935, 338
- National Opinion Research Center, 98
- National Science Foundation, 65, 174, 228
- Natural selection, 208
- Negative feedback, 6, 89, 376
- Nestlé, 93
 - Nestlé citizenship, 93
- Network configurations, 159
- Nonconformity, 72
 - covert, 72
- Normal science, vii
- Normative organizations, 152
- Normative reference organizations, 145, 149
- Norm of autonomy, 63
- Norm of obedience, 63
- Norm of reciprocity, 56, 60
 - a universal norm, 60
- Norm of service, 63
- Norms of due process, 75
- Not-invented-here syndrome, 405
- Nuclear family system, 281
- Occupations, 308
 - solidary functions of, 308
- Official goals, 216
- Oligarchy, 94
 - self-perpetuating, 94
- Oligopolistic industries, 36
- Oligopolistic market, 158
- Ombudsman, 102, 105
 - office of, 105
- Ombudsman programs, 73
- One-minute managing, 114
- One-party system, 281
- Open door policies, 73
- Open project time, 115
 - for research and development personnel, 115
 - system of promotion, 115
- Open social systems, 190
- Open systems theory, 2, 5-6, 190, 260, 389
 - impact of, 7
 - open system, 6
 - organizational feedback, 6
 - organizational inputs, 6
 - organizational outputs, 6
 - organizational throughputs, 6
- Operative goals, 216
- Opportunism, 15
- Organizational autonomy, 215
- Organizational change, 13, 162, 163
 - institutional sources, 13
 - normative theory of, 162
- Organizational citizenship, 87, 91, 95
 - growing pressures for, 95
- Organizational commitment, 39
- Organizational conflicts, 113
- Organizational constitutionalism, 87, 95, 107
 - data on, 97
 - hypotheses about, 95
- Organizational culture, 293, 297, 356, 396
 - concept of, 294
 - critique of concept, 294
 - degree of congruence between societal and, 293
 - different perspectives on, 294
 - linkages between societal and, 293
 - management attitudes, 301
 - role of leadership, 297

- Organizational culture from an
 - anthropological perspective, 295
 - major transformation, 396
 - normative dimension of culture, 295
- Organizational demography, 16
- Organizational design, vii-viii, 3, 22-23, 288, 290-291, 328, 397-407
 - alternative theories of, 23
 - classical management principles, 398
 - collegial, 288
 - conventional wisdom, 398
 - design decisions as experiments, 406
 - future organizations, 288
 - hierarchical, 288
 - institutional isomorphism, 398
 - major transformation, 396
 - managerial role implications, 23
 - recourse to a nexus of contracts, 398
 - test of vision and imagination of organizational leaders, 406
 - transnational, 290
 - ubiquitous problem, 398
 - Weberian hierarchical principles, 398
- Organizational destratification, 49-50
- Organizational development, 163
- Organizational domain, 262-263
 - definition of, 262
 - domain consensus, 263
- Organizational ecology, 2, 18-21, 141, 163
 - cross-national strategy, 18
 - environmental selection, 20
 - evolution, 18
 - liability of newness, 20
 - niche, 20
 - organizational density, 20
 - organizational form, 20
 - organizational founding, 20
 - organizational mortality, 20
 - structural inertia, 20
- Organizational effectiveness, viii, 8, 39, 42-43, 49, 52, 163, 213, 219, 303-304, 367, 369-371, 373, 377-378, 381-382, 405
 - and organizational process on, 303
 - as defined by interests of diverse stakeholders, 406
 - degree of congruence between societal culture and goals model, 369
 - ideas for organizational design and redesign, 382
 - impact of organizational process on, 303
 - imperative of organizations, 369
 - life-cycle development, 369
 - members' perceptions of, 378
 - multidimensional, 370
 - multiple constituency, 370
 - multiple-stakeholder perspective, 370
 - need for unobtrusive and nonreactive measures of, 381
 - organizational culture, 304
 - organization theory, 369
 - political concept, 370
 - problems of measuring, 378
 - problems of subjective measures, 381
 - ratios, 377
 - short-term and long-term changes, 405
 - six dynamic ratios, 213
 - subjective measures of, 378
 - systems-based model, 370
 - systems model of, 8
 - systems resource, 369
 - systems-theoretic view, 378
 - systems theory perspective, 374
 - three static ratios, 213
- Organizational efficiency, 371
- Organizational elites, 280
- Organizational environment, 243, 249
 - culture as hidden, silent, and turbulent component of, 249
- Organizational environment profile, 276
- Organizational experimentation, 407
 - strategy of, 407
- Organizational experiments, 51
- Organizational failure, 164, 170
- Organizational feedback, 376
- Organizational field experiments, 163
- Organizational form, 14, 303
- Organizational goals, 30, 215
 - commitment to, 30

- official, 215
- operative, 215
- Organizational hierarchy, 4, 12, 29–30, 39–41, 51, 80, 117, 161
 - consequences of, 39
 - degree of, 51
 - destratification-rationalization hypothesis, 49
 - distribution of information, 5
 - experimental perspective, 50
 - fourth dimension of, 39, 42
 - four-variable model of, 51
 - industrial democracy, 45
 - institutional level, 161
 - iron law of, 30
 - law of, 29
 - managerial level, 161
 - measurement of, 4
 - organizational commitment, 5
 - organizational effectiveness, 5
 - technical level, 161
 - three levels, 12, 161
 - work alienation, 5
- Organizational histories, 22
- Organizational imperatives, 290
- Organizational information, 42, 50
 - distribution of, 42
- Organizational lag, 113, 115, 117, 119, 122, 356, 405
 - concept of, 117
 - definition of the concept of, 115
 - modes of adaptation to, 115
 - relation to organizational performance, 119
 - theory of, 119
- Organizational learning, 401–402
 - double-loop learning, 402
 - exposing corporate error or corruption, 402
 - personnel avail themselves of organizational memory, 402
 - receptive to unlearning past mistakes, 402
 - single-loop learning, 402
 - tapping human capital at all levels of hierarchy, 402
- Organizational networks, 141
- Organizational pathology, 350
- Organizational performance, 113, 130–131, 133, 221
 - composite measure of, 133
 - dynamic measures of, 221
 - measurement of, 130
 - multidimensionality of, 130
 - objective measures, 131
 - subjective measures, 131
- Organizational populations, 19, 137
- Organizational pressures, 56–58
 - indicators of, 57
- Organizational processes, 243
 - communication, 243
 - recruitment, 243
 - socialization, 243
- Organizational rationalization, 50
- Organizational research, 180
 - quantitative-structural trend, 180
 - longitudinal analysis, 180
- Organizational slack, 353
- Organizational subculture, 254, 256, 296
- Organizational systems, 258
 - impact of culture on, 258
- Organizational technology, 41, 262
- Organizational variables, 291
 - centralization, 291
 - formalization, 291
 - size, 291
 - specialization, 291
 - technological complexity, 291
- Organization-environment nexus, 264, 303
 - fit between, 303
- Organization-environment relations, 2, 141
- Organization man, 69
 - consequences of, 72
 - ideology of, 69
 - structural sources of, 69
- Organizations, 12, 87, 89, 97, 119, 244, 259–261, 268, 279–280
 - academic, 87, 97
 - conjectures about the future design of, 288
 - cross-cultural research, 244
 - culture-bound, 244
 - culture-free, 244
 - institutional analysis of, 12
 - institutional effects on, 12
 - measure of functional autonomy, 260
 - microcosm of larger society, 260
 - military, 87, 97
 - religious, 87, 97
 - social-structural effects on, 259, 282

- social-structural model of, 261, 268
- social ranking of, 280
- social stratification among, 279
- sociotechnical perspective of, 119
- types of, 87, 97
- Organizations-environment relationships, 5, 8
- Organization-set configurations, 150
 - all-channel network, 150
 - chain, 150
 - concept of, 115
 - wheel, 150
- Organization-set model, 7, 155, 171–172, 181
 - systems-theoretic analysis, 155
- Organization-sets, 141, 145–146, 156, 191, 275–276, 287
 - boundary personnel, 146
 - comparative versus normative reference organizations, 145
 - concentration of input organizational resources, 146
 - dimensions of, 141, 145, 158
 - hypotheses about, 146
 - input-sets, 159
 - input versus output, 145
 - output-sets, 159
 - overlap in goals and values, 146
 - overlap in membership, 146
 - size of, 146
 - systems model of, 156
- Organization-set variables, 185
 - for studying administrative agencies, 185
 - input organization-set variables, 185
 - focal organization variables, 185
 - output organization-set variables, 185
 - output variables, 185
- Organization theory, vii, 1, 179–180, 187, 243
 - and macro-societal theory, 243
 - classical school, 179
 - comparative trend, 179
 - comprehensive versus middle-range theories, 2
 - field of, 179
 - growth industry, 1
 - institutional theory, 11
 - interorganizational relations, 180
 - middle range, 179
 - open systems theory, 5
 - organizational ecology, 18
 - resource dependence theory, 8
 - state of, 1
 - transaction-cost economics, 14
 - trends in, 179
 - Weber's theory of bureaucracy, 3, 179
- Output organization-set, 182
- Overlapping membership, 149
- Ownership and management, 93
 - legal link between, 93
- Oxford University, 273
- Paradigm, vii, 172
- Parsons' three hierarchical levels, 269
 - institutional level, 269
 - managerial level, 269
 - technical level, 269
- Participatory democracy, 104
- Path analysis, 43
- Patron-artist relationship, 62
 - ideal-typical, 62
- Patron-patronee relationship, 63
- Pepsi-Cola, 231
- Pepsodent Company, 147
- Personnel flows, 189–190, 206
 - in schools of business, 190
 - within a population of organizations, 189
- Personnel recruitment, 189
- Perspectivistic thinking, 56
- Peters and Waterman's excellent companies, 342
- Pharmaceutical Manufacturers Association, 167
- Planned economy, 49
- Plastics Recycling Foundation, 227, 233
- Pluralistic ignorance, 50
- Political democracy, 360
- Political institutions, 359
 - domain of rights, 359
- Pontificia Commissio, 98
- Positive feedback, 6, 89, 377
- Power, 87–90
 - and conflict, 87
 - exercise of, 87–90
 - illegitimate, 88
 - legitimate, 88
 - relationship between, 87

- Principle of Corporate Legitimacy, 344
- Principles of corporate democracy, 364–365
 - citizenship rights of all stakeholders, 365
 - community council, 364
 - employee council, 364
 - institutionalization of dissent, 365
 - organizational citizenship, 364
 - representation of all stakeholders on board of directors, 364
- Private property, 45
 - abolition of, 45
- Procedural due process, 67, 73–74
 - for all employees, 74
 - institutionalization of norms, 73
- Procter & Gamble, 231, 356
- Products liability, 391
 - legislative and judicial developments in, 391
- Professional associations, 52
- Professional ethics, 71
- Professionalization of business, 357
 - Brandeis' vision of, 357
- Professionalization of management, 70, 74, 349
- Professionalization of occupations, 319
 - sequence of stages, 319
- Professionalization of personnel, 179
- Professional management, 349
- Professional occupations, 69
- Professional societies, 277
- Protestant ethic, 68
- Public libraries, 127–128, 135
 - innovations in, 128
- Quasi-groups, 88
- R&D consortia, 14, 227, 229, 231, 234, 238–239
 - generic problems, 234
 - legal aspects, 230
 - managing, 232, 234
 - a new organizational form, 238
 - organizational form, 234, 239
 - profile of, 231
- R&D Limited Partnerships (RDLP), 229
- Rationalization, 49
 - process of, 49
- Rational-legal bureaucracy, 5
- Ratio of boundary to nonboundary personnel, 330
- Ratios of managerial to nonmanagerial personnel, 179
- Recursive model, 207
- Redesigning the corporation, 350
- Reference group, 72
- Research laboratories, 52
- Research organizations, 56, 61
 - bureaucratic employee, 61
 - employer-employee relationship, 61
 - professional-client relationship, 61
 - scientist as professional, 61
 - three structural components, 56
- Resource dependence theory, 2, 8–9, 21, 141
 - basic premise of, 8
 - environmental creation, 9
 - interorganizational dependencies, 8
 - resource criticality, 9
 - resource intensity, 9
 - strategic choice, 9
- Right to appeal, 71
- Role differentiation, 56
- Role of management, 363
 - as a distinct stakeholder, 363
 - fiduciary management, 363
 - new conception of, 363
- Role model, 65
 - employer-scientist relationship, 65
 - grantor-scientist relationship, 65
 - institutionalization of, 65
 - patron-artist, 65
- Role partners, 144, 287
- Role senders, 287
- Role-set profile, 273
- Role-sets, 58, 157, 269, 287, 300
 - analysis of, 157
 - Merton's definition of, 269
 - types of, 58
- Role-set sequences, 273
- Role strain, 5, 55, 58, 77
 - definition of, 55
 - scope of the problem of, 63
- Scandinavian ombudsman, 176
- Scientific community, 320
- Scientific management, 3

- Scientific societies, 52
- Sears and Roebuck, 210
- Securities and Exchange Commission, 155, 164
- Securities Exchange Act of 1934, 165
- Self-management, 45
 - workers', 45
- Self-regulation, 212
- Semiconductor Research Corporation, 231
- Sherman Antitrust Act of 1890, 4, 228, 230, 384
- Shop-floor democracy, 46–48
- Social audit, 383, 391
- Social construction of corporate reality, 389
- Social ethic, 68
- Social Security Administration, 174
- Social stratification, 37
- Social-structural model of
 - organizations, 276, 279
 - institutional components of, 276, 279
 - social ranking of organizations, 279
- Social structure, 259, 261, 264, 268, 287
 - alternative concepts of, 264
 - definition of, 259
 - institutional component of, 259
 - Merton's three constituents of, 268
 - organizational culture, 300
 - organizational effects on, 284
 - societal culture, 300
- Social system, 124
- Social system of a society, 268
 - four nested concepts of norms, roles, organizations, and institutions, 268
- Societal culture, 252, 254, 292–296
 - dominant values and norms of, 296
 - dominant values of, 252
 - management attitudes, 301
 - model of societal culture, organizational culture, and societal development 299–305
 - societal development, 299
- Societal culture and organizational culture, 297
 - degree of congruence between, 297
- Societal development, 293
 - impacts of determinants of organizational effectiveness on, 304
- Sociotechnical systems, 7, 48
 - theory of, 7
- Sociotechnical systems framework, 121, 123, 125
- Span of control, 4, 32, 179
- Specialization, 4–5
 - degree of, 4
- Spranger's theory of psychological types, 253
- Stakeholder audit, 395
- Stakeholder Bill of Rights, 346
- Stakeholder Board of Directors, 345
 - metaphysical director, 345
- Stakeholder concept, 340
 - Principle of Corporate Effects (PCE), 340
 - Principle of Corporate Rights (PCR), 340
- Stakeholder-derivative suits, 388
- Stakeholder Fiduciary Principle, 345
- Stakeholder management, viii, 333, 361, 366, 383, 385, 387
 - new organizational paradigm, 383
 - pluralistic theory, 366
 - redesigning the corporation, 361
- Stakeholders, 302, 340–341, 353
 - analytic hierarchy process, 353
 - balance conflicting interests of, 353
 - concept of, 340
 - dissensus among, 353
 - management attitudes toward, 302
 - multiple attribute decision, 353
 - narrow definition, 341
 - quasi-resolution of conflicts, 353
 - wide definition, 341
- Stakeholder theory, 25, 335, 352, 383, 391
 - balancing the interests of diverse stakeholders, 391
 - critique of, 388
 - organizational effectiveness, 383
- Stakeholder theory of the corporation, 353, 387, 392
 - corporate legitimacy, 352
 - political model, 387
 - research on organizational effectiveness, 392
- Standard Motor Company, 33, 47

- Standard Oil of New Jersey, 210, 286
- Status consistency, 34, 36
 - definition of, 34
- Status-sequences, 63, 272–273, 287, 300
 - Merton's definition of, 272
- scientists, 63
- Status-sets, 270, 287, 300
 - Merton's definition of, 270
- Strategic alliances, 403
- Strategic choice, 9
- Strategy, 211
 - definition of, 211
- Structural complementarity, 189, 191, 202
- Structural-functional theory, 37
- Structural similarity, 189, 191
- Structural variables, 179, 192
- Student-faculty ratio, 191
- Subjective culture, 247
- Superior-subordinate conflicts, 77, 79, 80
- Superordinates, 90
 - discretionary power of, 90
- Supplier-firm-customer chain, 338
- Supracorporate challenge, 232
- Systemic processes, 123
 - feedback effects, 123
 - inputs, 123
 - outputs, 123
 - transformations, 123
- Systems analysis, 156
- Systems of organizational effectiveness, 370
 - four components of, 370
- Systems theory perspective, 374, 375
 - four systemic processes, 374
 - organizational inputs, 374
 - organizational outputs, 375
 - systems concept of feedback, 375
 - transformation processes, 375
- T Groups, 114
- Task environment, 263
 - definition of, 263
- Taylorism, 142
- Teachers Insurance Annuity Association, 108
- Technical core, 126
- Technical innovations, 113–114, 116–117, 124, 126–127, 136–137
 - resistance to, 116
 - trickle-down theory, 117
 - trickle-up theory, 117
- Technical personnel, 249
- Technical system, 124
- Tennessee Valley Authority, 180
- Theocratic societies, 12
- Theoretical monism, 2
- Theoretical pluralism, 2
- Theories of organization, viii
 - institutional theory, viii
 - open systems theory, viii
 - organizational ecology, viii
 - resource dependence, viii
 - transaction-cost economics, viii
 - Weber's theory of bureaucracy, viii
- Theory Z, 114
- Third-party intervention, 90
- Time-span of discretion, 33, 42
- Title VII of the Civil Rights Act of 1964, 338
- Totalitarian societies, 12
- Trade associations, 277
- Traditional view of the corporation, 387
 - economic model, 387
- Tragedy of the commons, 339
- Transaction-cost economics, 2, 14–16, 18, 21, 398–399
 - asset specificity, 16
 - assumptions of, 15
 - bounded rationality, 16
 - frequency, 16
 - governance structure, 16
 - hierarchical transactions, 16
 - market transactions, 16
 - opportunism, 16
 - transaction, 16
 - transaction costs, 16
 - uncertainty, 16
- Transaction costs, 17
 - interfirm, 17
- Transnational interactions, 289
- Transnationalism, 327
 - values of, 327
- Transnational organizations, 307, 331
 - multinational corporation, 331
 - types of, 331
- Transnational strategy, 290

- Transorganizational environments,
 - 241, 243
 - culture and organizations, 243
 - social structure and organizations, 259
- Trickle-down theory, 117
- Trickle-up theory, 117
- Turnover, 43
 - rates of, 43
- Types of conflict, 81
 - administrative conflicts, 81
 - technical conflicts, 81
- Types of societies, 281
 - modern, 281
 - traditional, 281
 - transitional, 281
- UNESCO, 319, 326–327
- Uniform Code of Military Justice, 102
- Union of International Associations, 313, 320
- Union of International Engineering Organizations, 319
- Unitary functional structure (U-form), 373
- United Nations, 309–311, 317, 326
 - Charter, 310, 311
 - Economic and Social Council of, 326
- U.S. Army, 100
- U.S. Constitution, 90
- U.S. Postal Service, 174
- Universal element of organizational structure, 109
- Universities, 52
- University governance, 107
- Utilitarian organizations, 152
- Utopian communities, 92
- Value orientations, 248, 251, 295
 - dimensions of, 251
 - Kluckhohn and Strodtbeck's fivefold classification, 248
 - theory of, 295
- Vertical integration, 10, 17, 315
- Voluntary associations, 44, 103, 279
- Voluntary hospitals, 209
- Water Carriers Association, 166
- Weber's theory of bureaucracy, 2, 3, 142, 172
 - charismatic authority, 3
 - expertise, 4
 - legal authority, 3
 - rational-legal authority, 4
 - rules, 4
 - system of graded positions, 4
 - three bases of legitimate authority, 3
 - traditional authority, 3
 - written documents, 4
- Western ethnocentric bias, 305
- Western societies, 259
- Whistleblowers, 402
- Winchester, 273
- Winterbottom v. Wright* in 1842, 337
- Work alienation, 39, 43
- Workers' control, 45
- Workers' councils, 45
 - in a textile factory in Poland, 45
- World society, 289
- Yugoslav factories, 31
- Yugoslavia, 39
 - self-management systems of, 39
- Yugoslav industrial organizations, 46